August 18, 2023 Version 1

Safety Recall: 2023 CR-V FHEV e-CVT Replacement

AFFECTED VEHICLES

Year	Model	Trim	VIN Range
2023	CR-V	Hybrid	Check the VIN status for eligibility

BACKGROUND

A resolver is a rotation angle sensor for controlling an electric motor. The generator motor resolver covers in affected vehicles may have been damaged during the manufacturing process. Over time, this damage may cause the cover to separate from the resolver, potentially contacting and cutting the resolver wire harness and leading to resolver malfunction. This malfunction may cause the illumination of the MIL, the engine to transition to EV mode with range limited by battery capacity, and/or prevent the vehicle from restarting.

CUSTOMER NOTIFICATION

Owners of affected vehicles will be sent a notification of this safety recall.

Do an In VIN status inquiry to verify eligibility.

Some vehicles affected by this campaign may be in your new or used vehicle inventory.

Failure to repair a vehicle subject to a recall or campaign may subject your dealership to claims or lawsuits from the customer or anyone else harmed as a result of such. To see if a vehicle in inventory is affected by this safety recall, do a VIN status inquiry before selling it.

CORRECTIVE ACTION

Replace the e-CVT transmission.

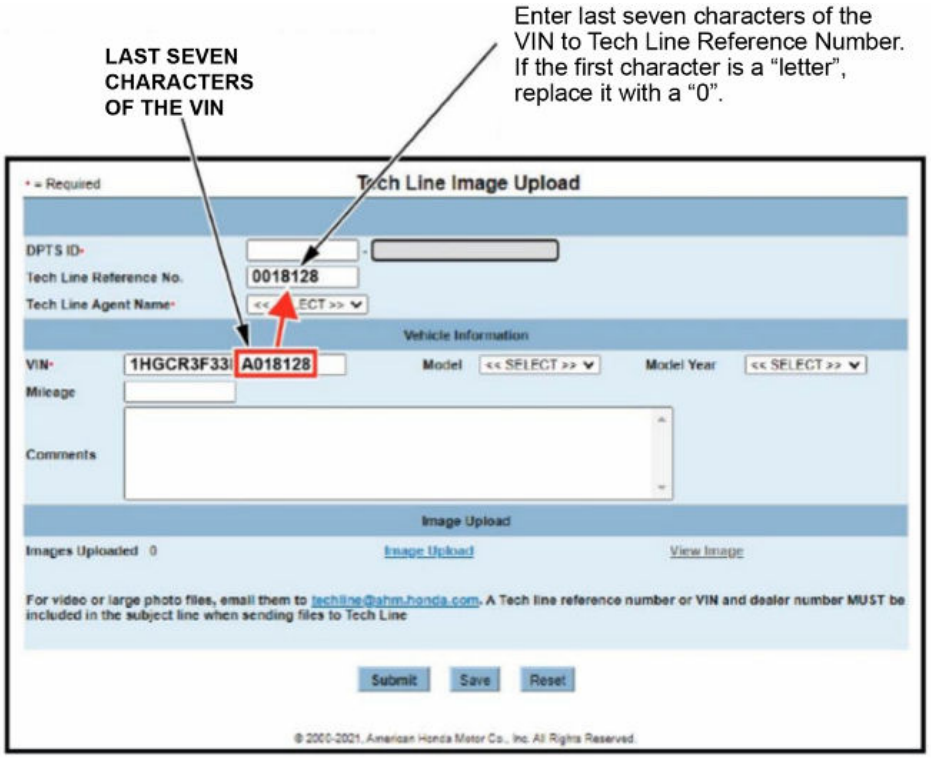
PARTS INFORMATION

Part Name	Part Number	Quantity
ATR Kit	20041-69M-A02RM	1
Exhaust Pipe Gasket	18302-SP0-003	1
Exhaust Pipe Gasket	18303-T2B-A01	1
Drain Gasket (TOYO)	19012-PD2-004	1
Set-Ring (30X2.2) (Set Ring)	44319-S0X-A01	1
Set-Ring (30X2.2) (Set Ring)	44319-SD4-010	1
Bolt (12 Point 8X21)	90113-S10-000	4
Bolt-Washer (14X85)	90130-T20-A00	1
Flange Bolt (14X33)	90164-T20-A00	2
Flange Bolt (12X50)	90167-TBA-A00	2
Flange Bolt (14X50)	90168-SMG-E01	3
Flange Bolt (14x105)	90175-3A0-A00	1
Bolt-Washer (14X85)	90179-T20-A01	6
Flange Bolt (14X50)	90181-TLA-A00	2
Self-Lock Nut (10mm)	90212-SA5-003	6
Self-Lock Nut (12mm) (Clinch) (Sato Rashi)	90215-SB0-003	6
Spindle Nut	90305-S3V-A11	2
Flange Nut (12mm)	90371-TBA-A00	1
Drain Plug Washer (18mm)	90471-PX4-000	1
O-Ring (92X2.2) (Arai)	91304-PRH-003	1
Drain Plug Washer (20mm)	94109-20000	1
Split Pin (3.0X22)	94201-30220	2

1. To order a replacement transmission, fill out the AT/CVT order form under Reman Parts/Special Orders section on the iN.

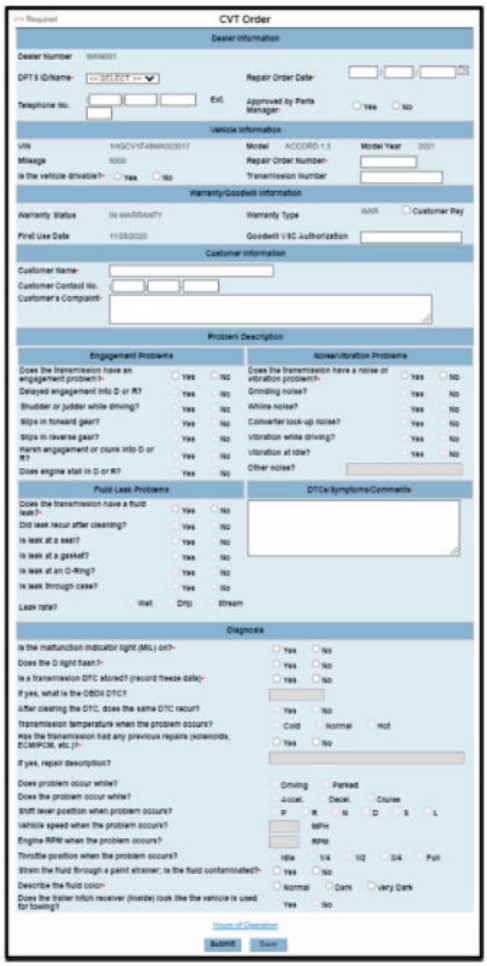
   NOTE:

   - If you have not contacted Tech Line, then use the last 7 digits of the VIN for the Tech Line Reference Number.
   - If the 11th character of the VIN has a letter instead of a number, replace it with a zero.
   - Select Tech Line Agent Name—**Tech Line.**



2. Fill out the AT/CVT Order Form under Reman Parts/Special Orders section on the iN.

   NOTE: Once the CVT order has been received, your order will be reviewed by RPO. Additional requests and images may be required by RPO before release of the CVT.



REQUIRED MATERIALS

Part Name	Part Number	Quantity
Super High Temp Urea Grease	08798-9002	1 (1 container can repair up to 20 vehicles)
HEVF Type-1	08200-9022	5
Honda Long Life Antifreeze/Coolant Type 2	OL999-9011	1

TOOLS INFORMATION

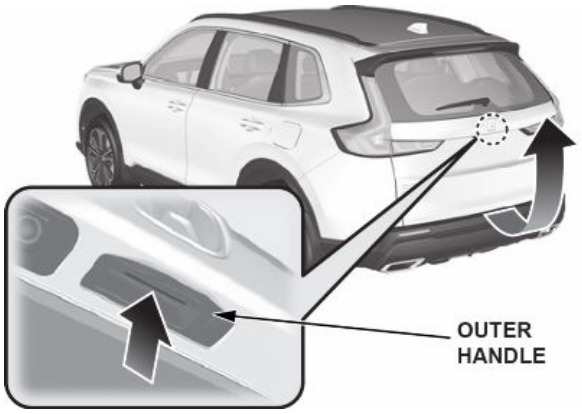
Tool Part Number	Description
7MAC-SL00102/ 07MAC-SL00202	Ball Joint Remover
07AAF-SDAA100/07AAE-SJAA100	Protector
07AAK-SNAA120	Universal Lift Eyelet
AAR-T1256	Engine Hanger
VSB02C000016	Subframe Holder
070AG-SJAA10S	Subframe Alignment Pin

WARRANTY CLAIM INFORMATION

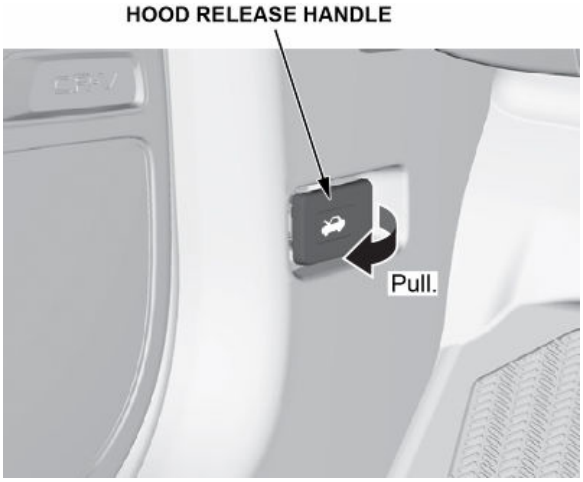
Operation Number	Description	Flat Rate Time	Defect Code	Symptom Code	Template ID	Failed Part Number
2181DC	CR-V Hybrid e-CVT Replace (Includes alignment)	5.8 hr	6RX00	HFF00	A23075A	20041-69K-A02

REPAIR PROCEDURE

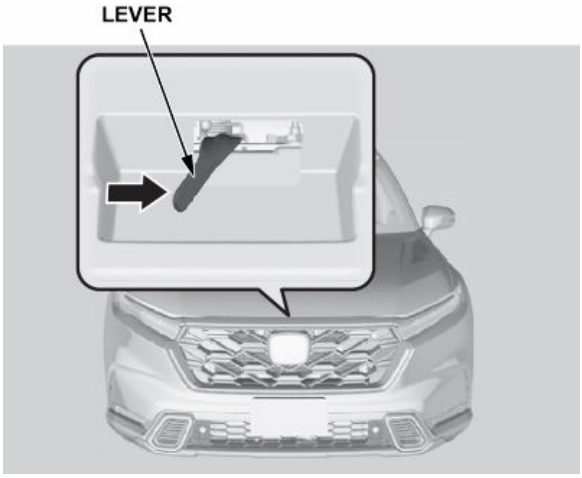
1. Set the wiper arms to service position.
   1.1. Turn the vehicle to the ON mode.
   1.2. Turn the vehicle to the OFF mode. Within **10 seconds** after turning the vehicle to the OFF mode, hold the windshield wiper switch at MIST position for **2 seconds** or more.
   1.3. Release the wiper/washer switch. The wiper should stop at the service position.
2. Open the tailgate.
   2.1. Press the outer handle and lift open the tailgate.



3. Open the hood.
   3.1. Pull the hood release handle under the driver's side lower corner of the dashboard.



3.2. Push the hood latch lever (located under the front edge of the hood to the center) to the side and raise the hood. Once you have raised the hood slightly, you can release the lever.



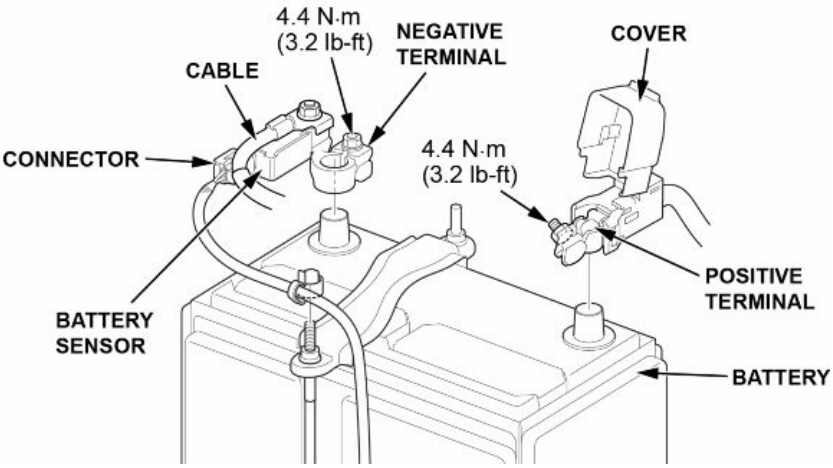
3.3. Lift the hood to open.

4. Disconnect the 12 volt battery terminals.
   4.1. Make sure the vehicle is in the OFF (LOCK) mode.
   4.2. Disconnect and isolate the negative battery terminal, with the 12 volt battery sensor attached, from the 12 volt battery.
   4.3. Open the positive terminal cover.

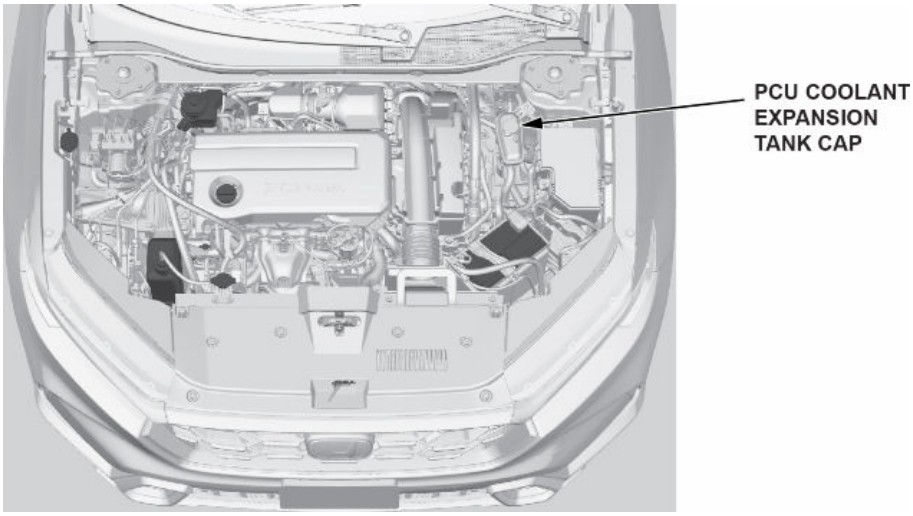
4.4. Disconnect the positive terminal from the 12 volt battery.

NOTICE

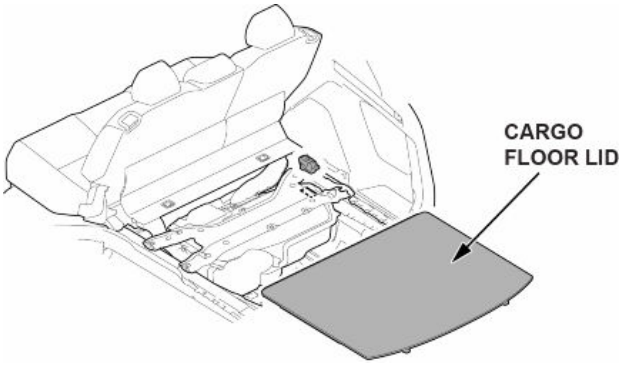
- Always disconnect the negative side first.
- To protect the 12 volt battery sensor connector from damage, **do not** hold it when removing the terminal.
- **Do not** disconnect the 12 volt battery sensor from the cable.



5. Remove the PCU coolant expansion tank cap.



6. Remove the cargo floor lid.

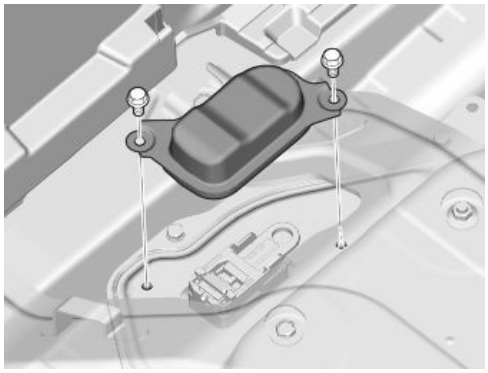


7. Remove the service plug.

⚠ WARNING

The power cables carry high voltage when the electric powertrain is energized. To avoid serious injury from electrical shock, **do not** turn on the system with the power cables disconnected.

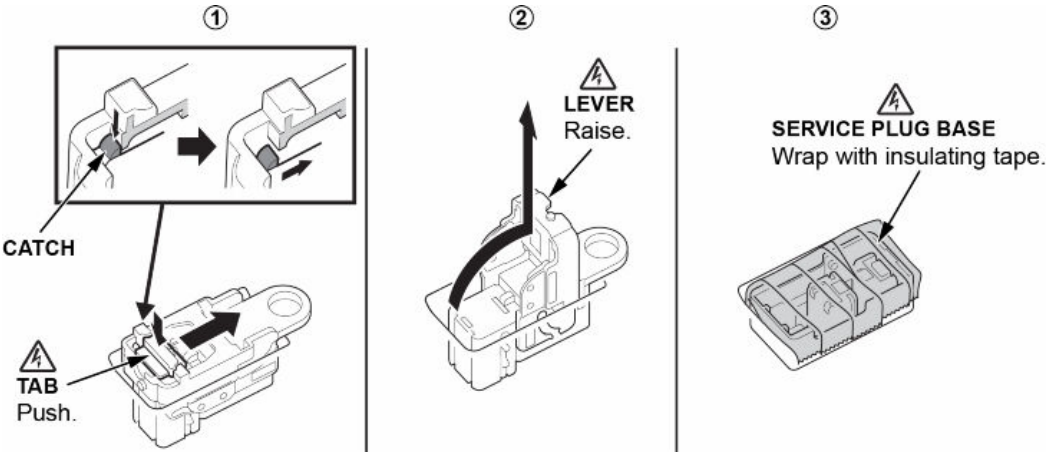
7.1. Remove service plug lid.



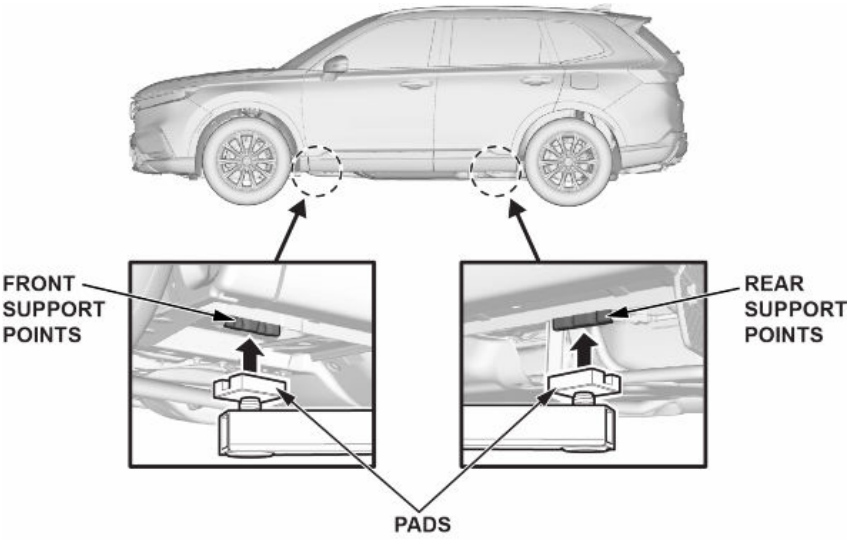
7.2. Push the tab and cancel the catch. Then, slide the tab to the unlocked position until you hear a click.

7.3. Raise the lever and remove the service plug.

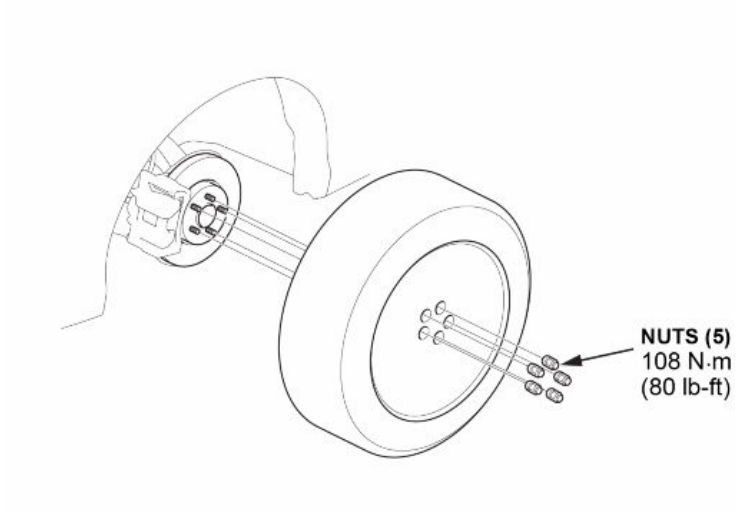
7.4. Wrap the service plug base with insulating tape.



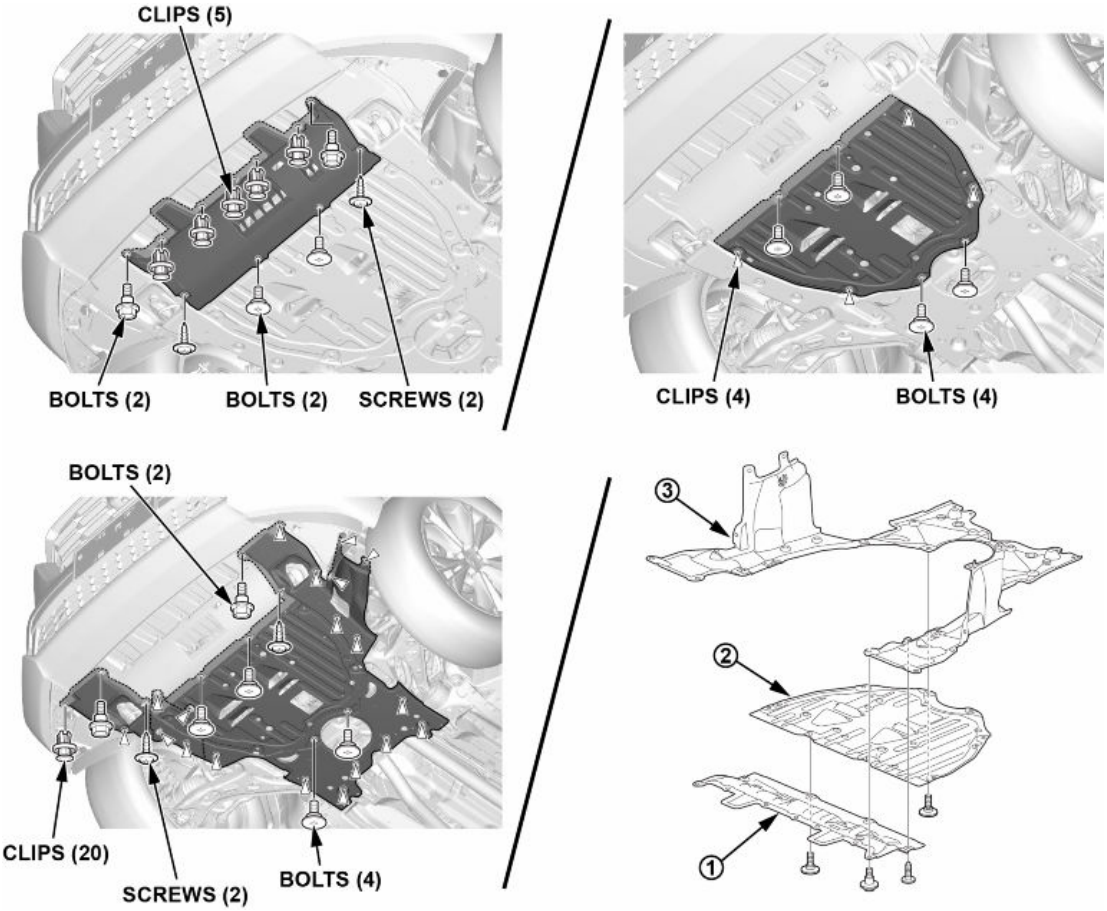
8. Lift the vehicle to comfortable working height.
   8.1. Position the lift pads under the vehicle's front and rear support points.
   NOTE: Be sure the lift pads are properly placed to avoid damaging the vehicle.
   8.2. Raise the lift a few inches, then rock the vehicle gently to be sure it is firmly supported.



9. Remove the front wheels.

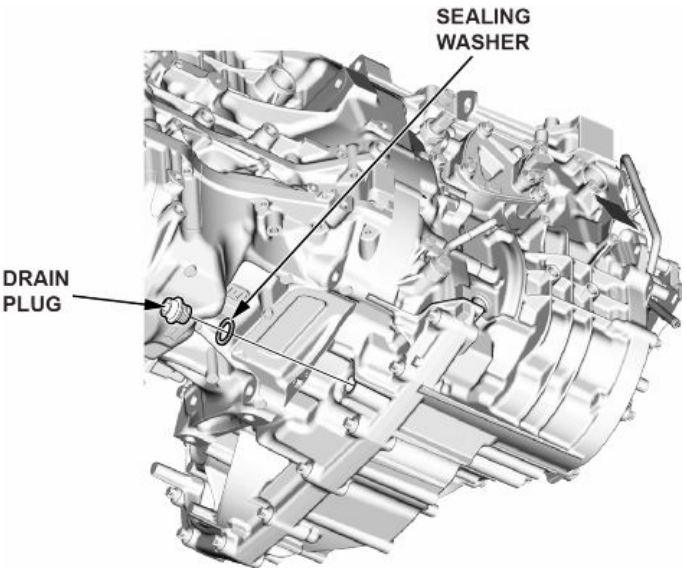


10. Remove the engine undercover.

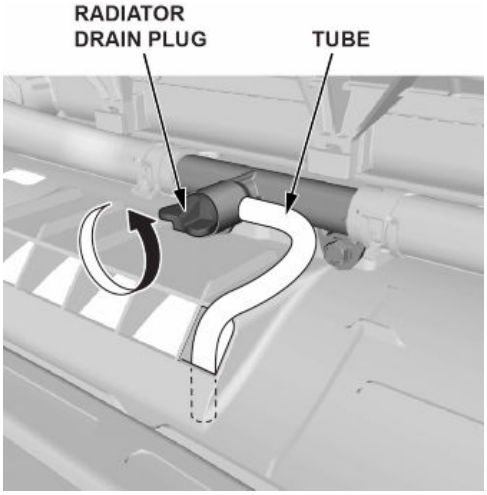


11. Drain the transmission fluid.

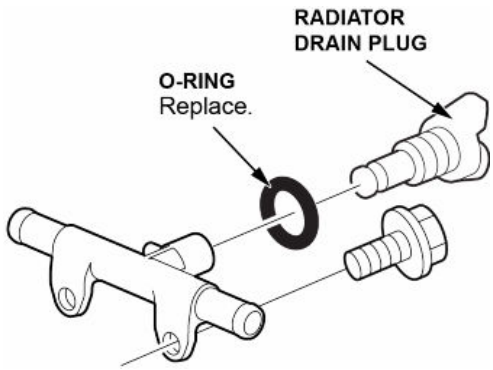
    11.1. Remove the drain plug and the sealing washer.



12. Drain the PCU coolant.
    12.1. Attach a tube to the drain valve, then loosen the radiator drain plug to drain the PCU coolant.

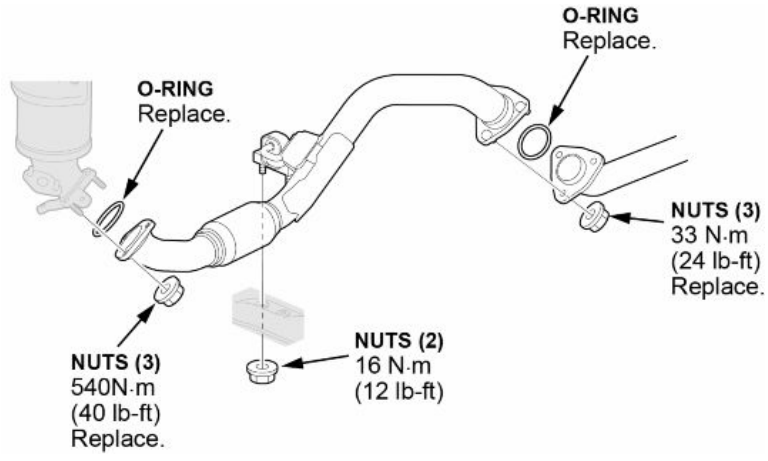


    12.2. When the coolant has drained completely, remove the drain plug and **install a new O-ring**.

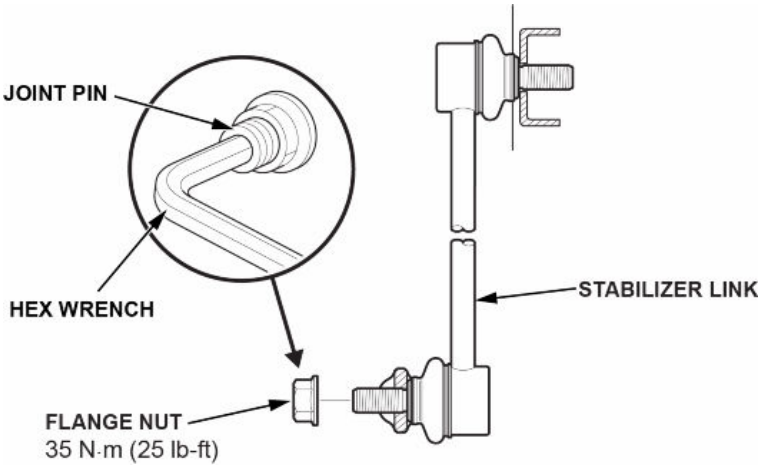


    12.3. Reinstall the drain plug and tighten.

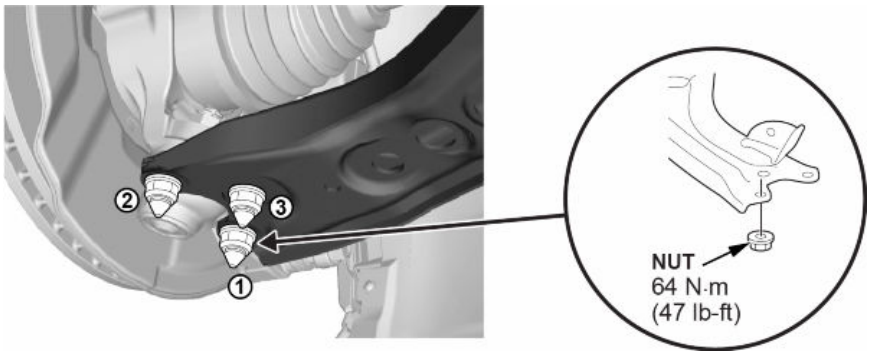
13. Remove exhaust pipe.



14. Disconnect the front suspension area parts.
    14.1. Front stabilizer link ball joint (bottom fastener on both sides).

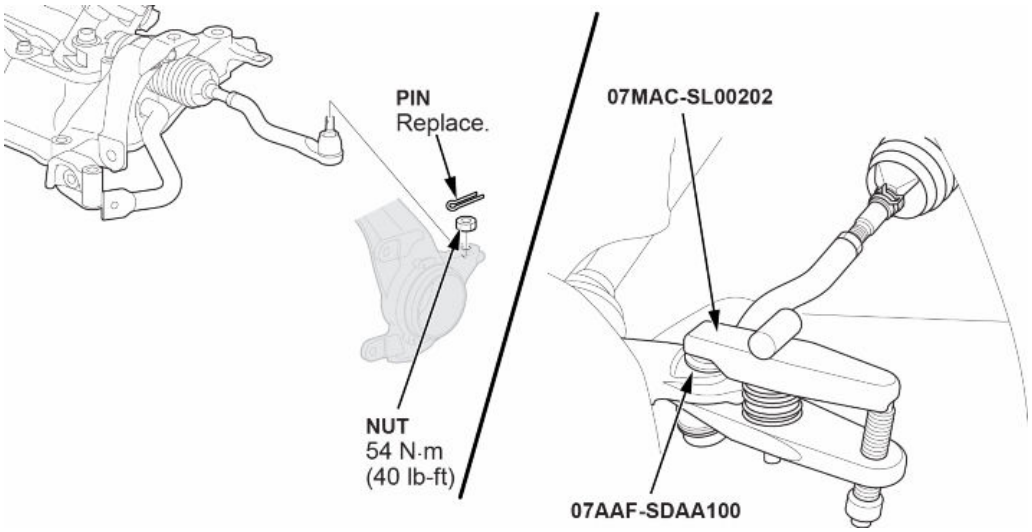


    14.2. Remove both front lower arm ball joint fasteners.



    14.3. Remove both front lower arm bolts (front lower arm assembly).

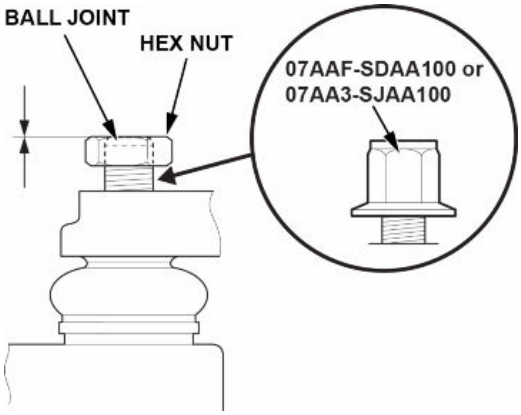
15. Disconnect both tie-rod end ball joints.



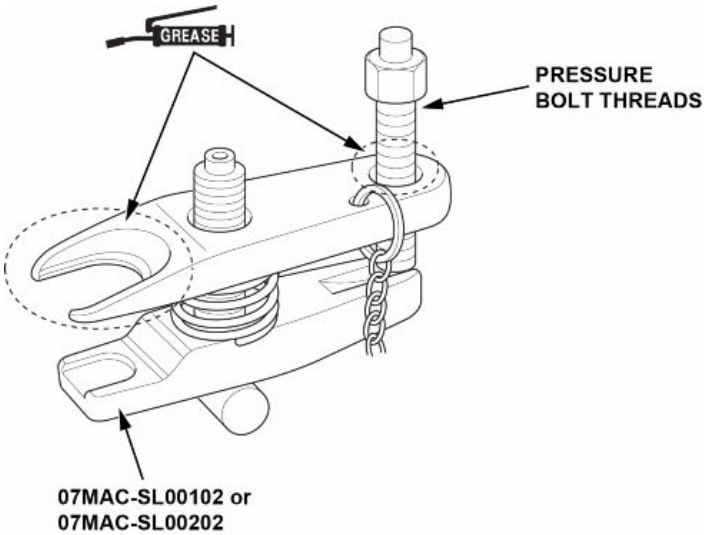
15.1. Separate both tie-rod end ball joints from the knuckles.

15.1.1. Install a hex nut or a ball joint thread protector onto the threads of the ball joint.

NOTE: Make sure the nut is flush with the ball joint pin end to prevent damage to the threaded end of the ball joint pin.



15.1.2. Apply grease to the ball joint remover on the areas shown. This will ease the installation of the tool and prevent damage to the pressure bolt threads.



15.1.3. Loosen the pressure bolt and install the ball joint remover.

NOTE:

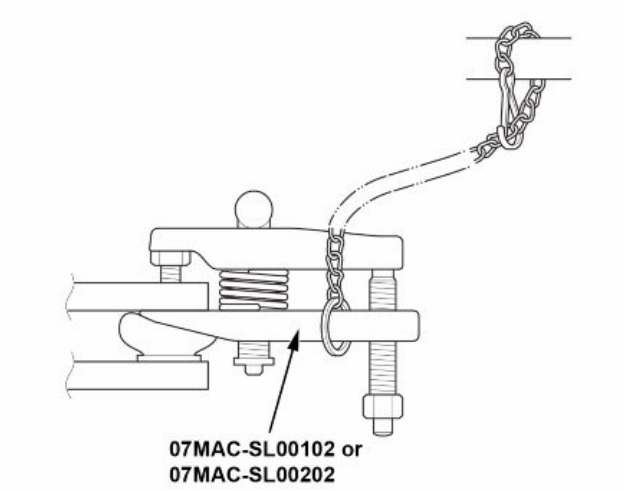
- Insert the jaws carefully, making sure not to damage the ball joint boot.
- Fasten the safety chain securely to the suspension arm or the subframe. **Do not** fasten it to a brake line or wire harness.

15.1.4. Adjust the jaw spacing by turning the adjusting bolt.

15.1.5. Make sure the head of the adjusting bolt is in the position to allow the jaw to pivot.

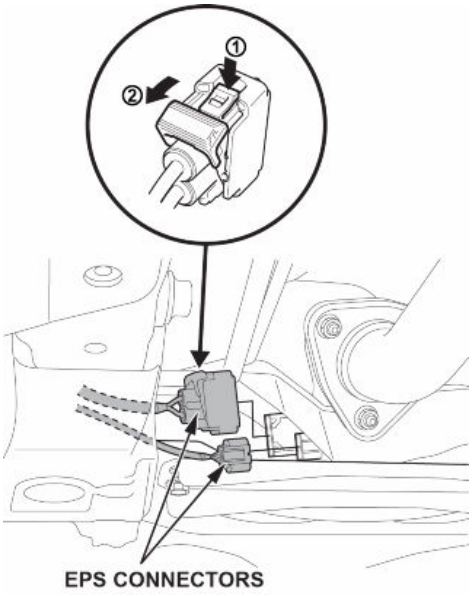
15.1.6. Tighten the pressure bolt until the ball joint pin pops loose from the ball joint connecting hole. If necessary, apply penetrating type lubricant to loosen the ball joint pin.

NOTE: **Do not** use pneumatic or electric tools on the pressure bolt.

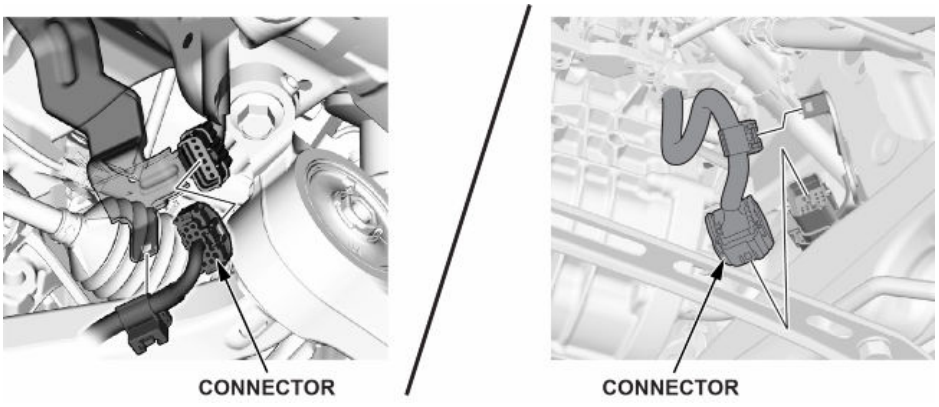


16. Disconnect the wire harness and connectors.

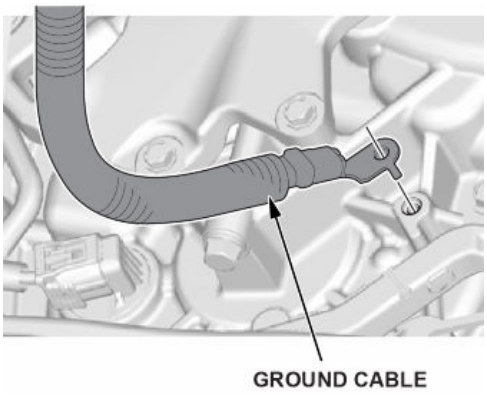
16.1. Disconnect the EPS connectors.



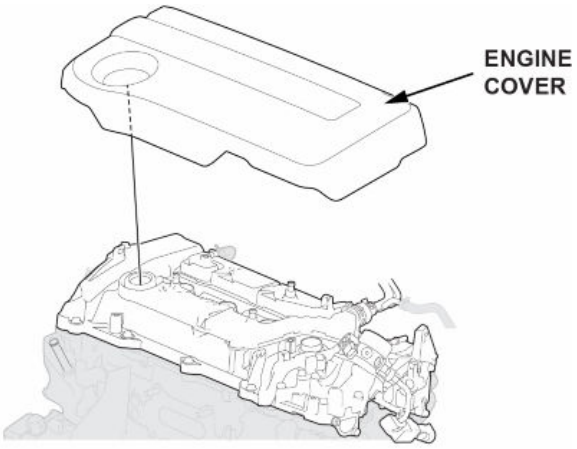
16.2. Disconnect e-CVT transmission harness connectors.



16.3. Remove the e-CVT transmission ground cable.

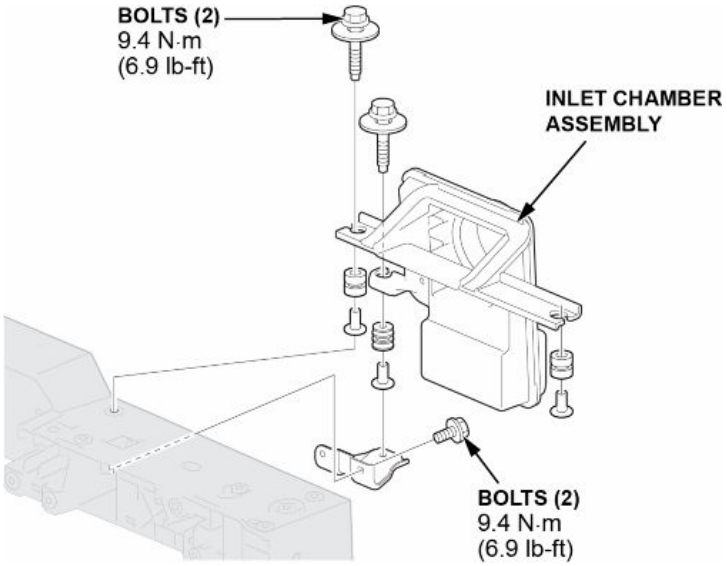


17. Lower the vehicle.
18. Remove the engine cover.

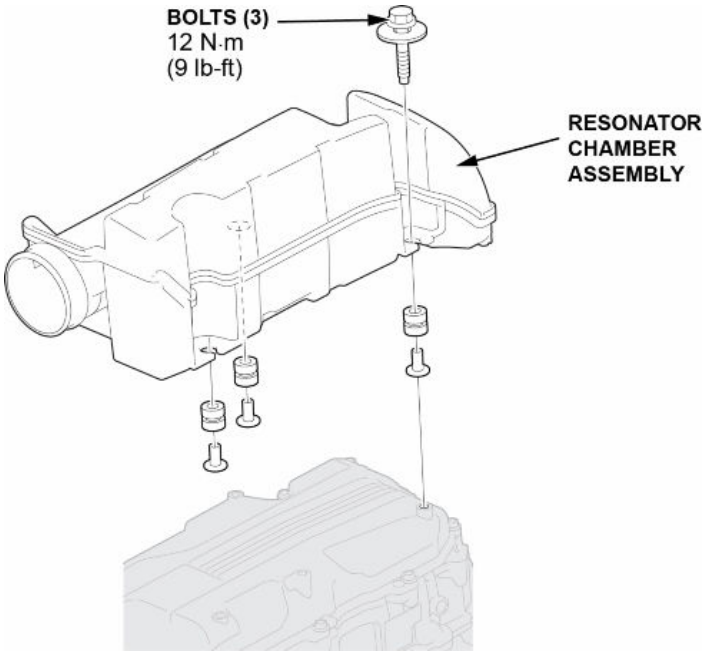


19. Remove the air cleaner area parts.

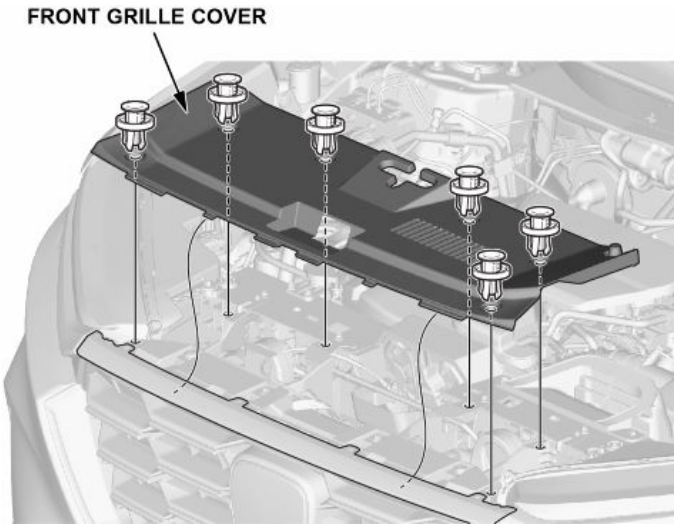
19.1. Remove the inlet chamber assembly.



19.2. Remove the resonator chamber assembly.

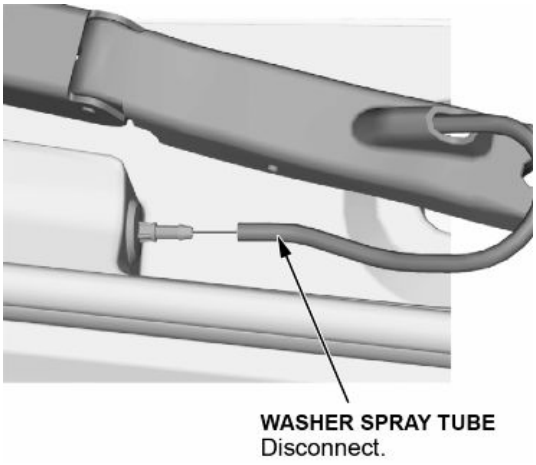


20. Remove the front grille cover.

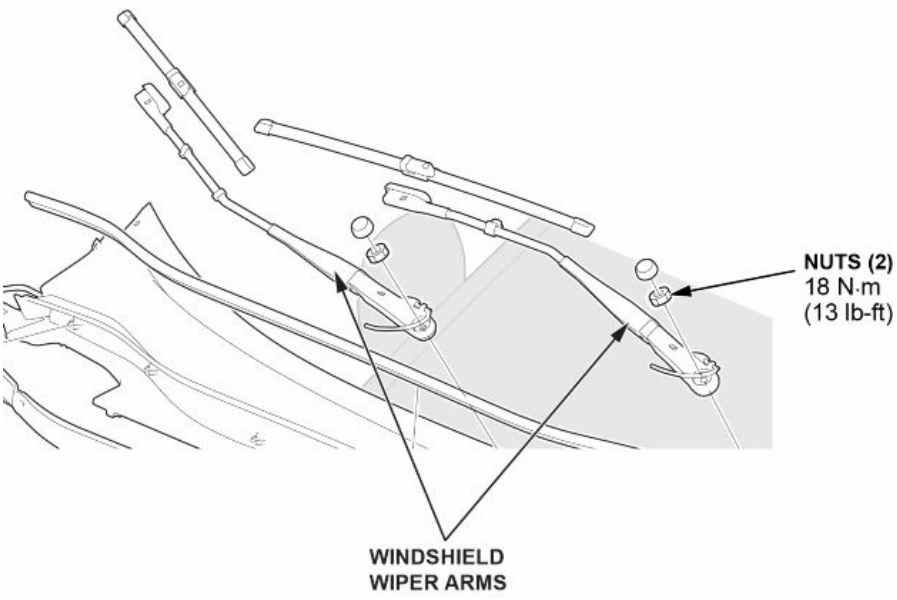


21. Remove the cowl cover.

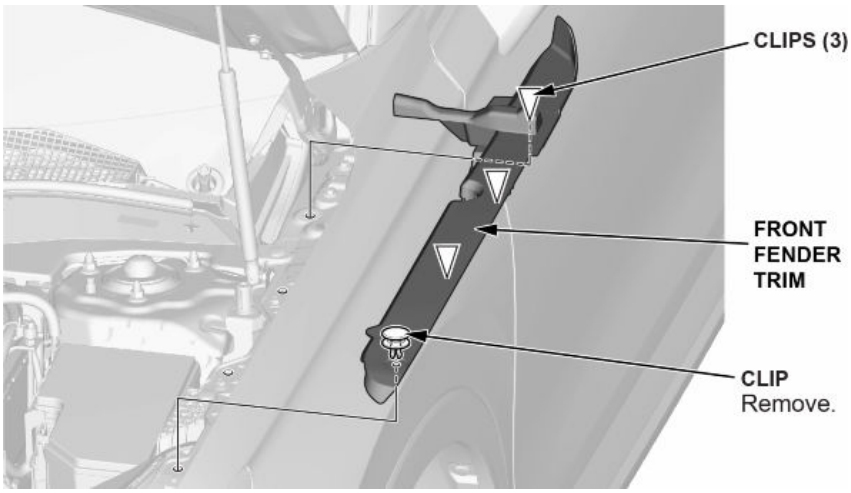
    21.1. Disconnect the washer spray tube.



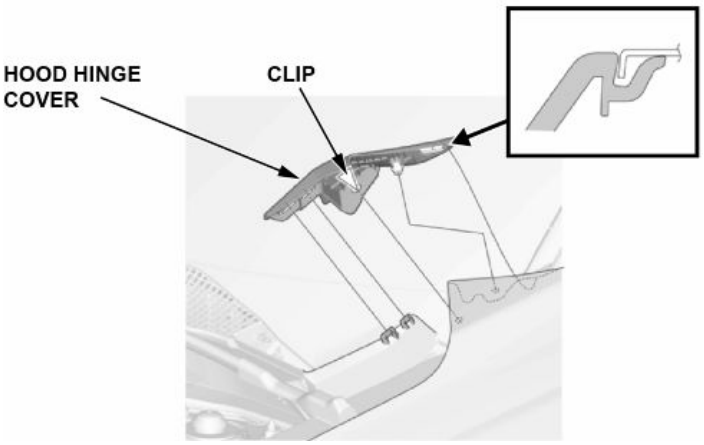
    21.2. Remove the windshield wiper arms.



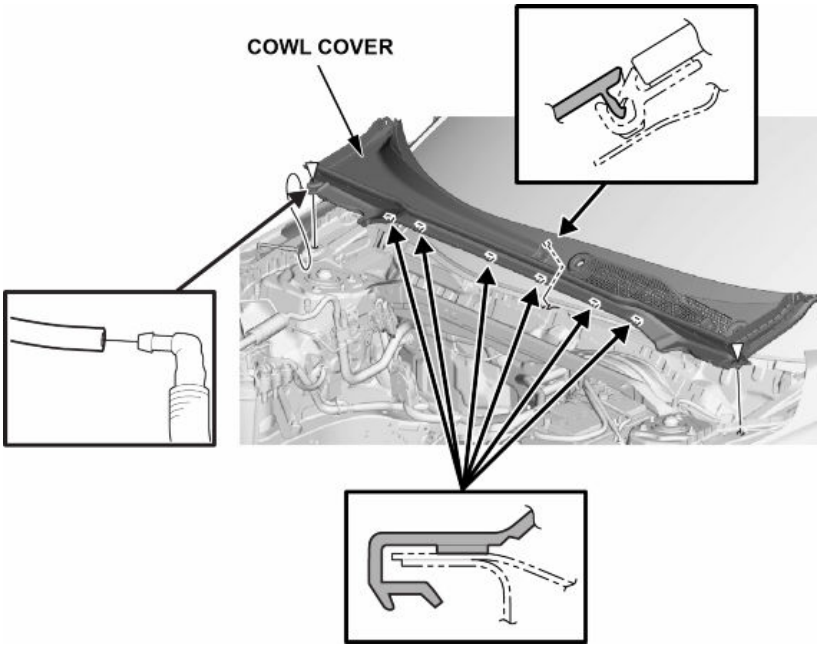
21.3. Remove both front fender trims.



21.4. Remove both hood hinge covers.



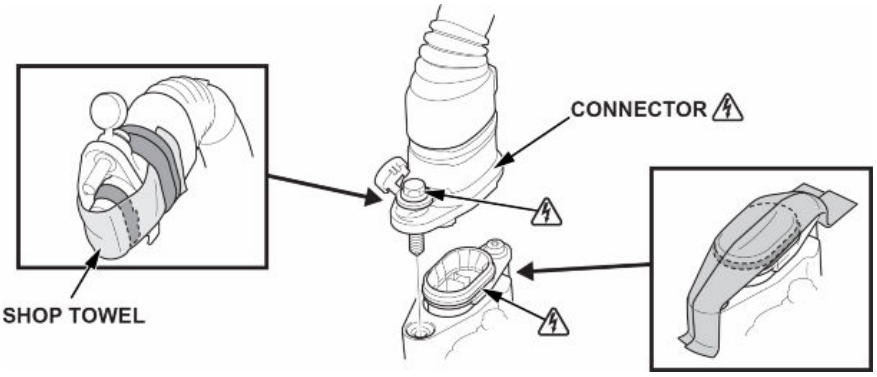
21.5. Remove the cowl cover.



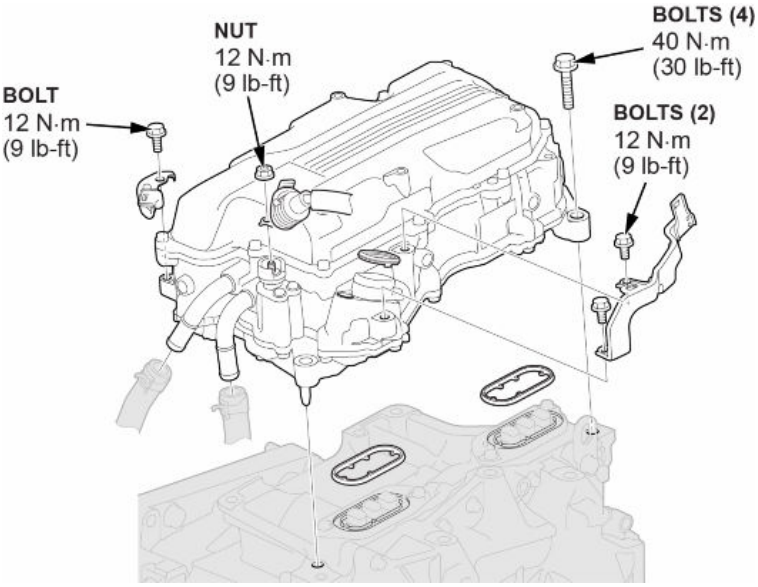
21.6. Disconnect the connector from PCU and wrap the items with insulating tape.

NOTE:

- Cover the connector using a rag or shop towel.
- **Do not** wrap around the insulating tape on the sealed part.

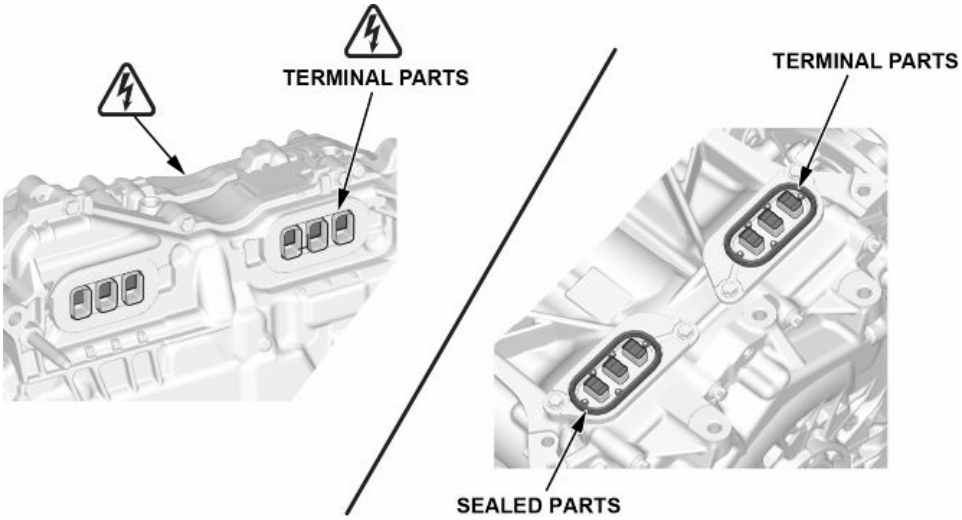


22. Remove the PCU assembly.

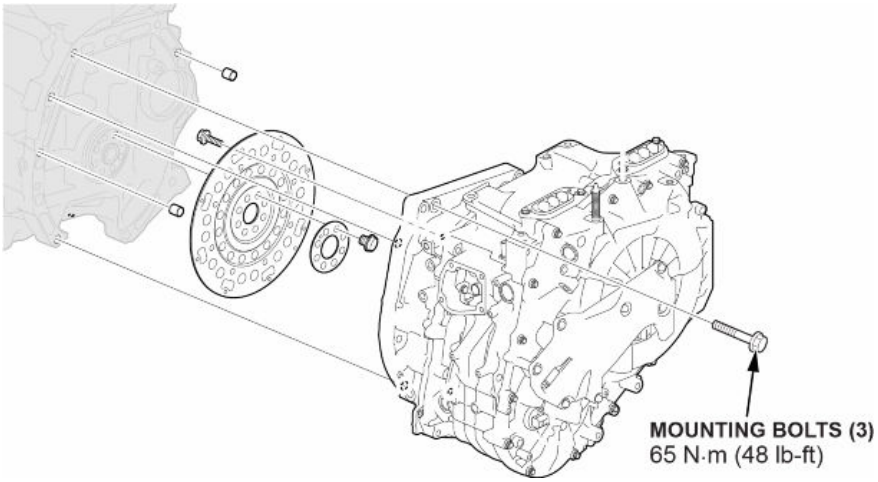


NOTE:

- Immediately clean off oil, coolant, dirt, or grease to the terminal parts or the sealed parts.
- **Do not** stick adhesive tape, or anything similar, directly to the terminal parts or the sealed parts.

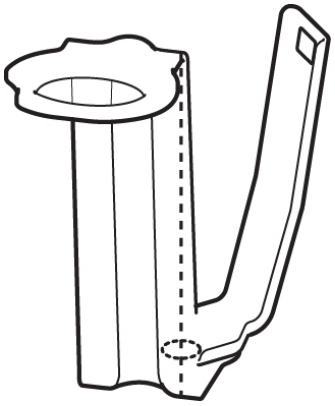


23. Remove the upper transmission mounting bolt.



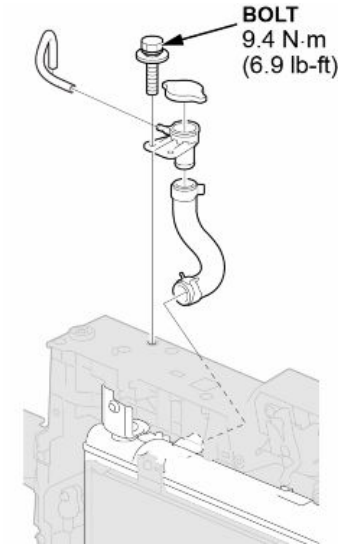
24. Remove or move the radiator area parts:

    24.1. Expansion tank lower bracket

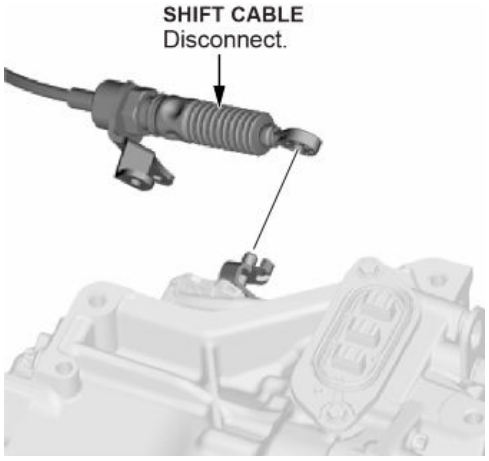


    24.2. Water filler

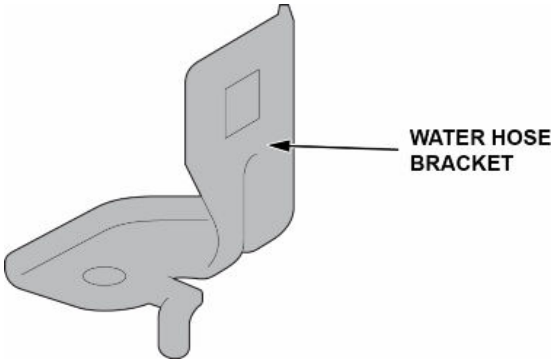
    NOTE: **Do not** disconnect the water bypass hoses.



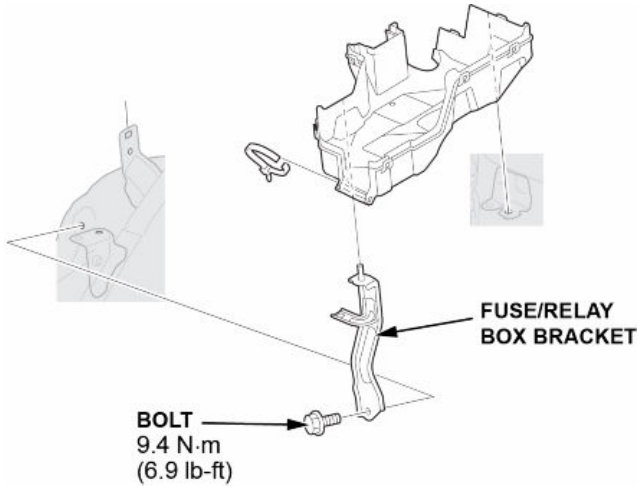
25. Disconnect the shift cable.



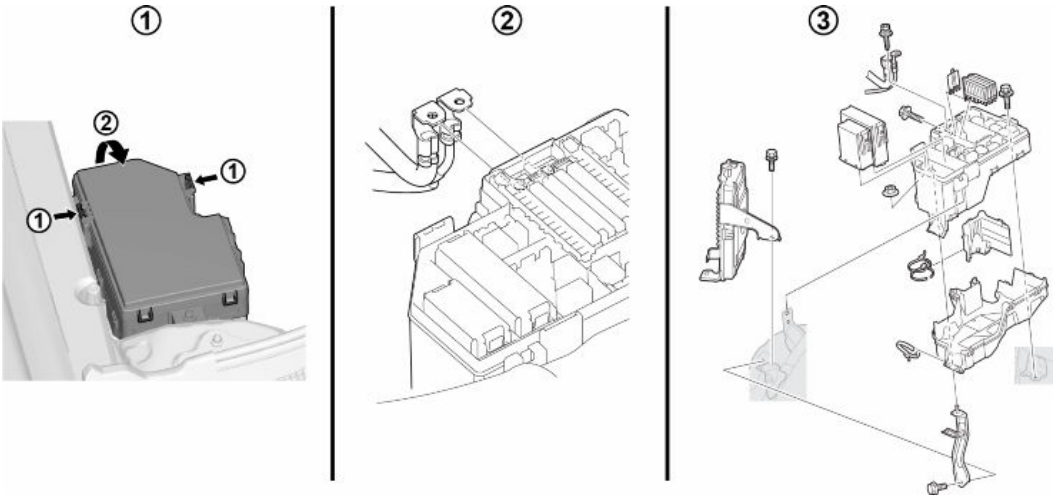
26. Remove the water hose bracket.



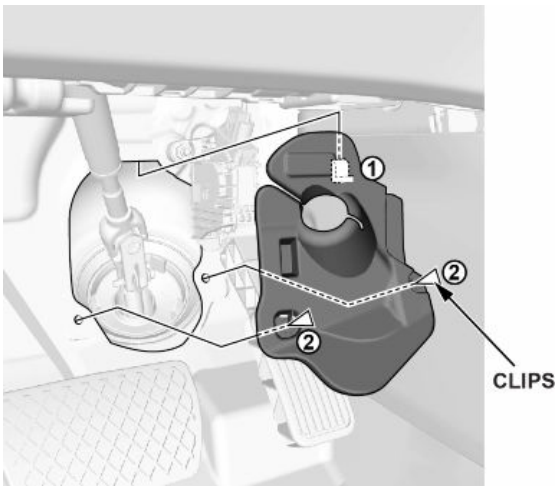
27. Remove the under-hood fuse/relay box bracket.



28. Loosen the under-hood fuse/relay box.



29. Disconnect the steering joint.
    29.1. Remove the steering joint cover.

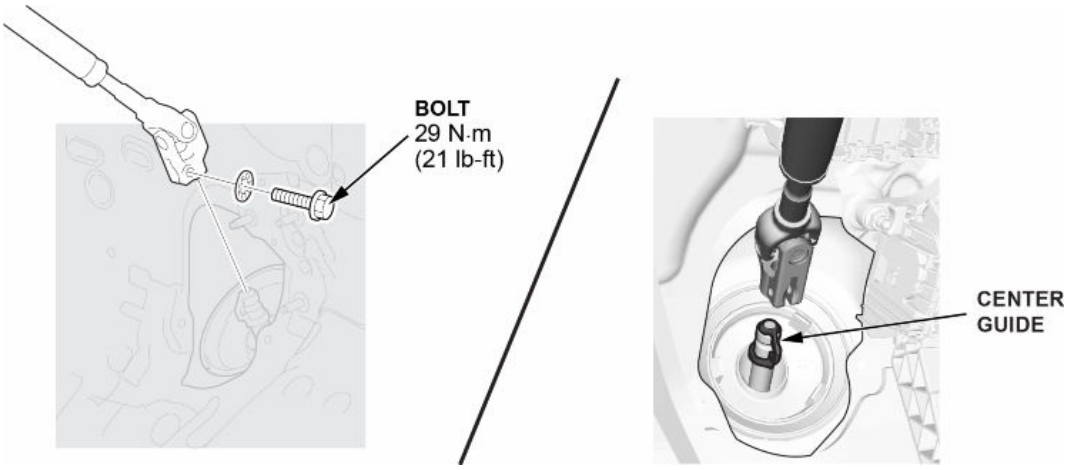


    29.2. Set the steering column accordingly:
        1. Steering column full tilt down position.
        2. Steering column full telescopic out position.

29.3. Disconnect the steering joint.

NOTICE

- If the center guide is in place and has not moved, leave it in place.
- If the center guide has come off, discard it.

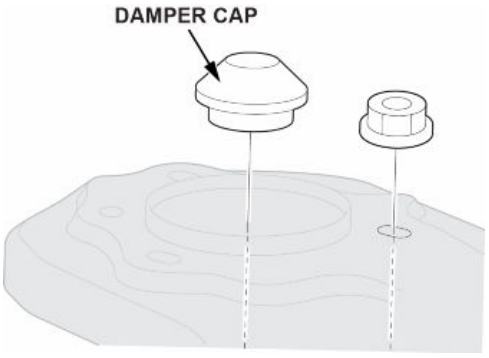


30. Install the engine support hanger.

NOTE:

- Be careful when working around the windshield.
- Be careful not to damage the hood opener cable when installing the engine support hanger at the front bulkhead.

30.1. Remove both front damper caps.



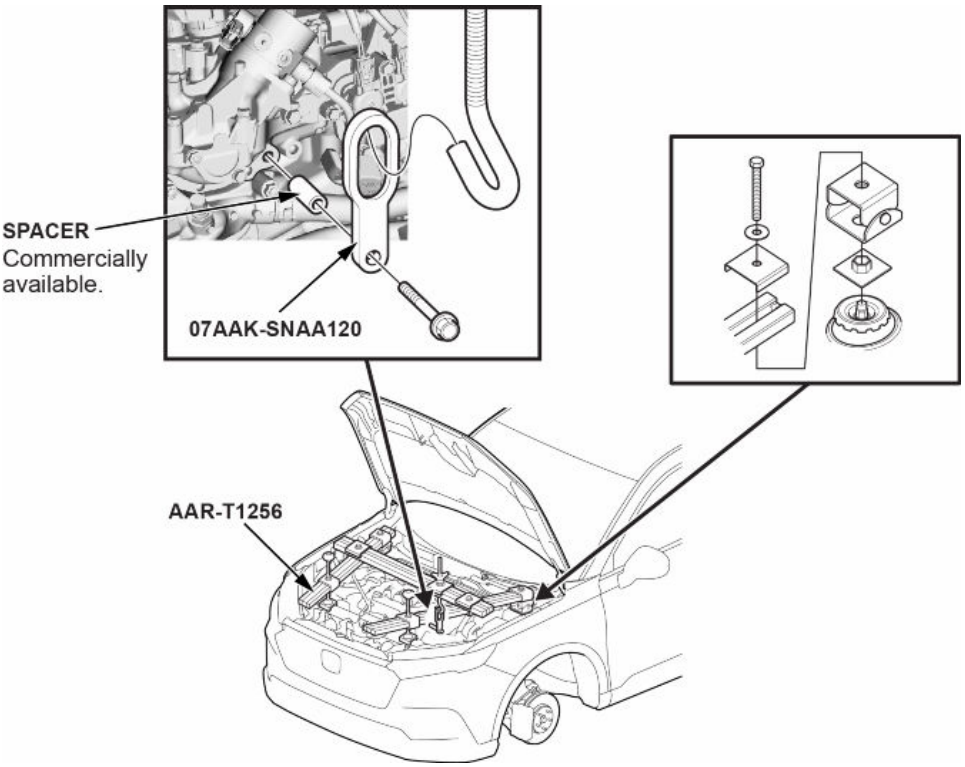
30.2. Install the universal lifting eyelet.

NOTE: Make sure the universal lifting eyelet does not interfere with the surrounding parts.

30.3. Install the engine support hanger onto the vehicle.

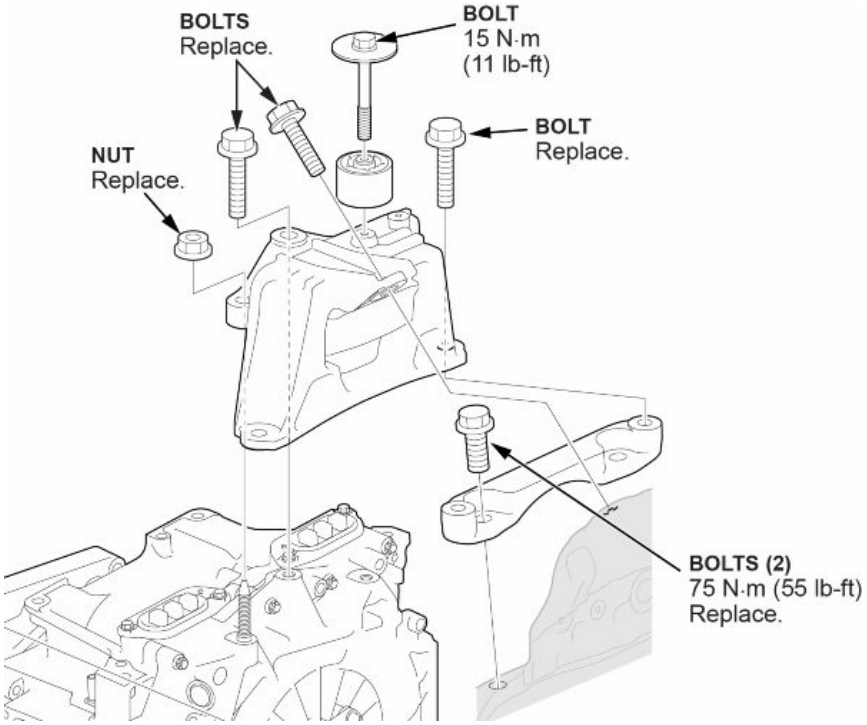
30.4. Attach the hook to the slotted hole in the universal lifting eyelet.

30.5. Tighten the wing nut by hand to support the engine/transmission.

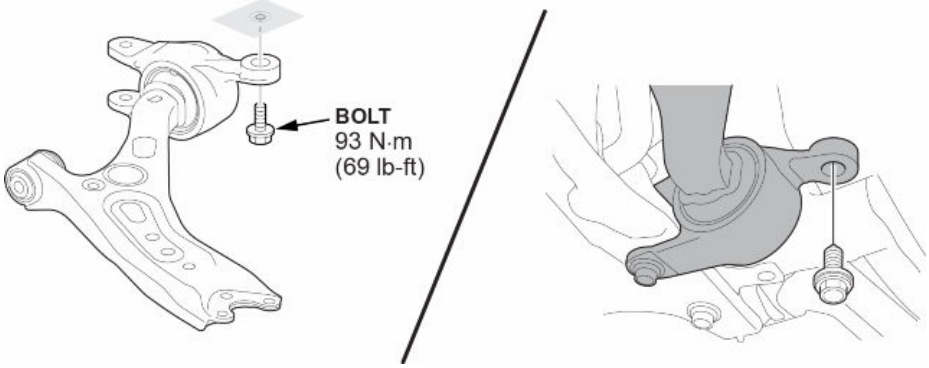


31. Remove the transmission mount.

    NOTE: **Do not** remove the bolt shown below from the transmission mount. If the bolt is removed, the transmission mount must be replaced as an assembly.

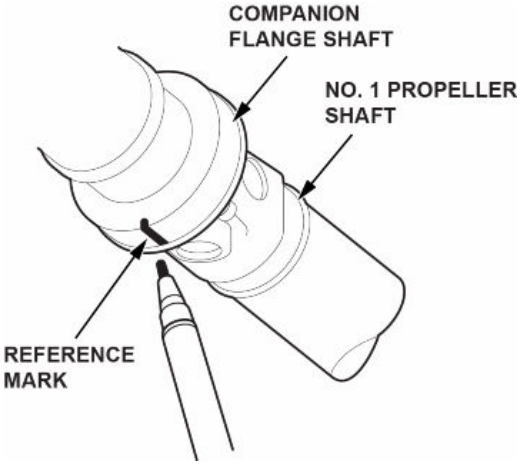


32. Remove the compliance bushing outer bolt.

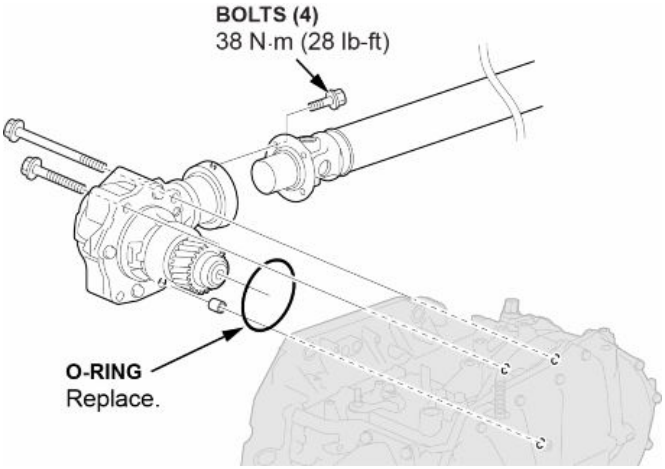


33. Remove the transfer assembly.

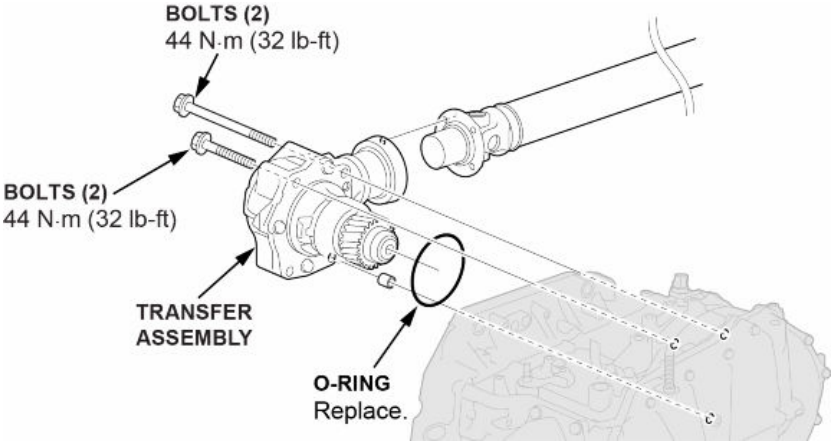
33.1. Make reference marks across the No. 1 propeller shaft and the companion flange shaft.



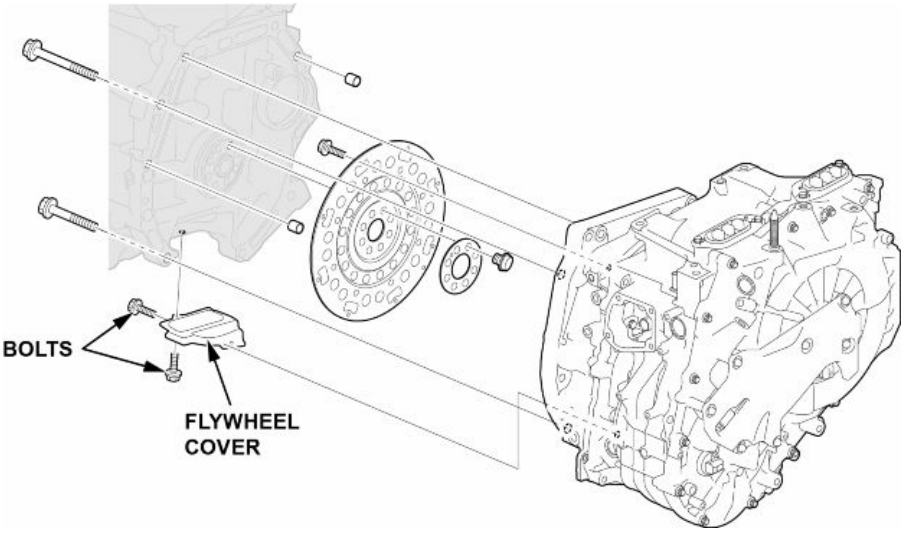
33.2. Disconnect the propeller shaft from the transfer assembly.



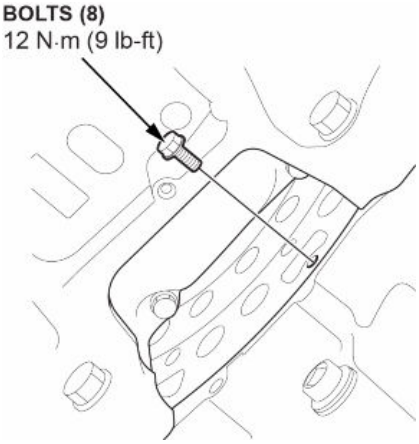
33.3. Remove the transfer assembly.



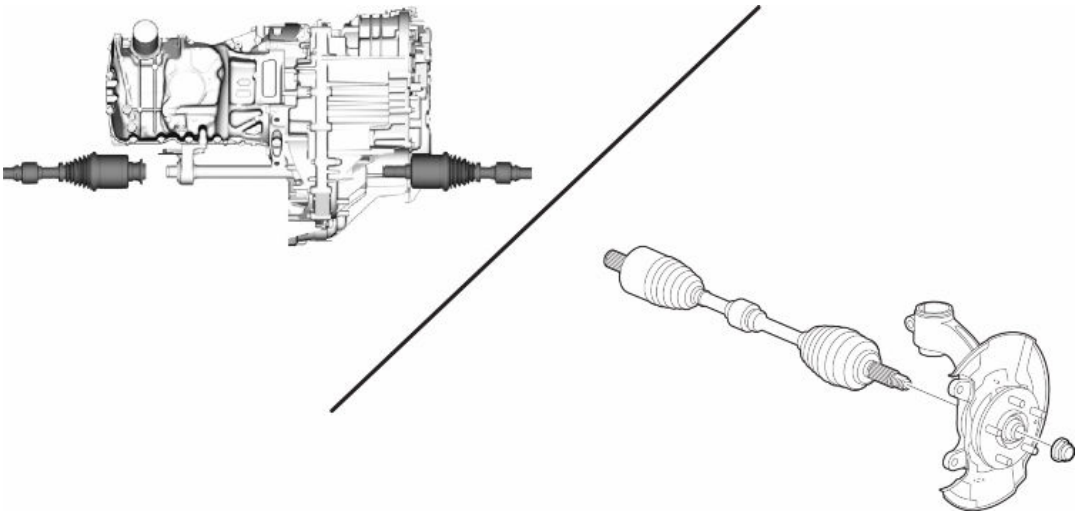
34. Remove the flywheel cover.



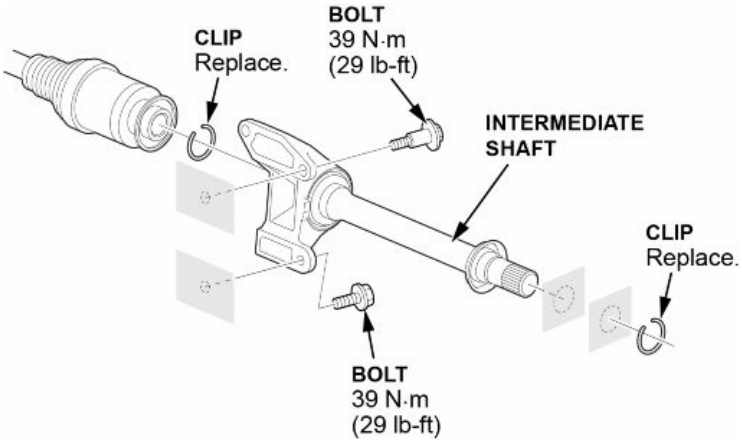
34.1. Rotate the crankshaft pulley to remove the eight bolts from the drive plate.



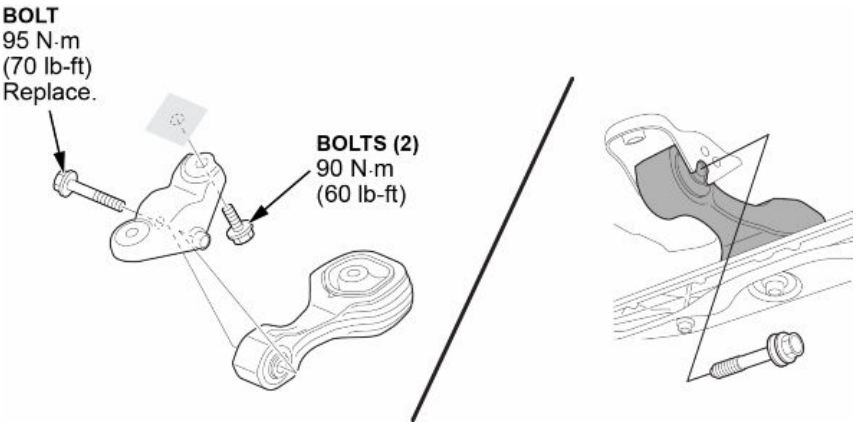
35. Remove the left and right axle shafts.



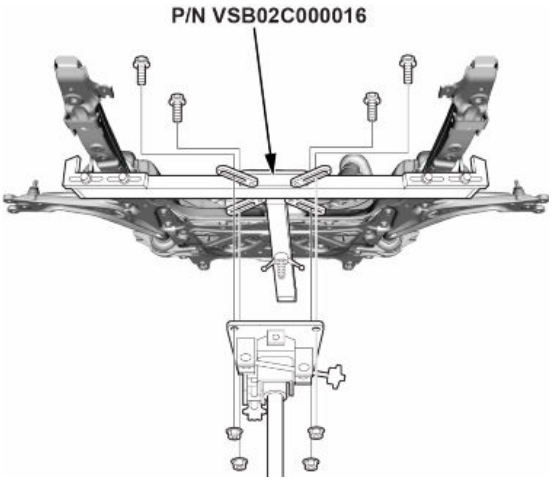
36. Remove the intermediate shaft.



36.1. Disconnect the torque rod from the engine.



37. Attach the subframe adapter to the front subframe.

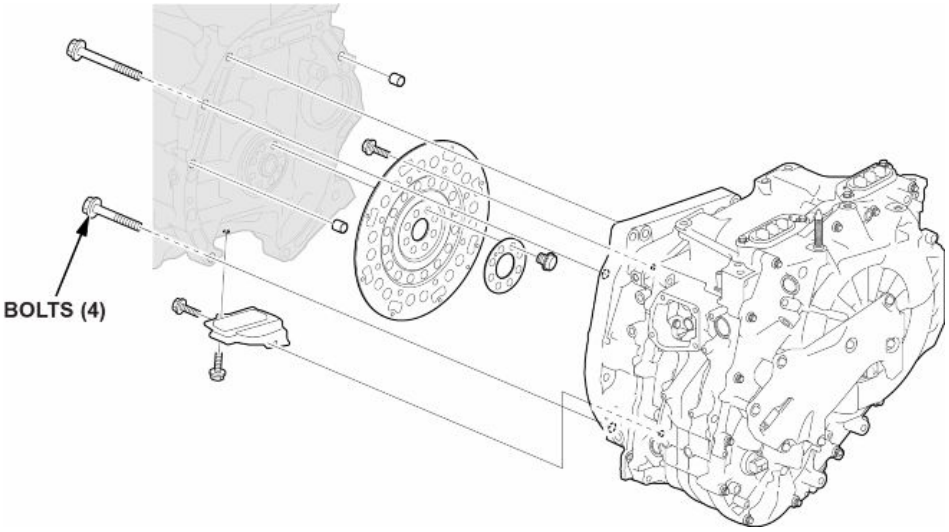


38. Remove the subframe bolts, then lower the subframe.

39. Disconnect the transmission fluid cooler hose from the transmission.

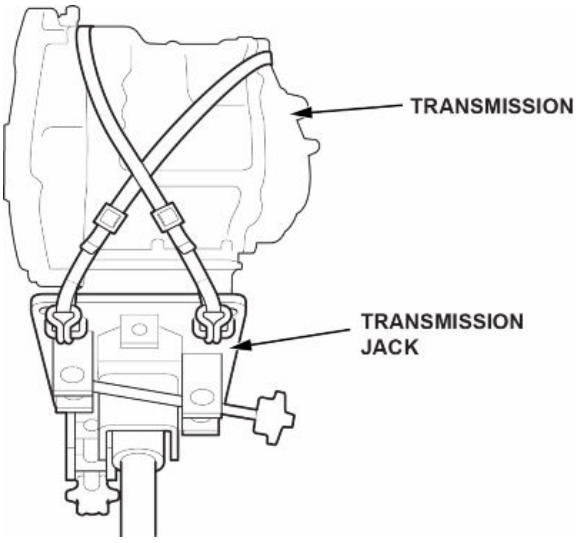
40. Remove the e-CVT transmission.

    40.1. Remove the remaining transmission mounting bolts.



    40.2. Check that the transmission is free of hoses and electrical wiring.

    40.3. Using a transmission jack, hold the transmission as shown.

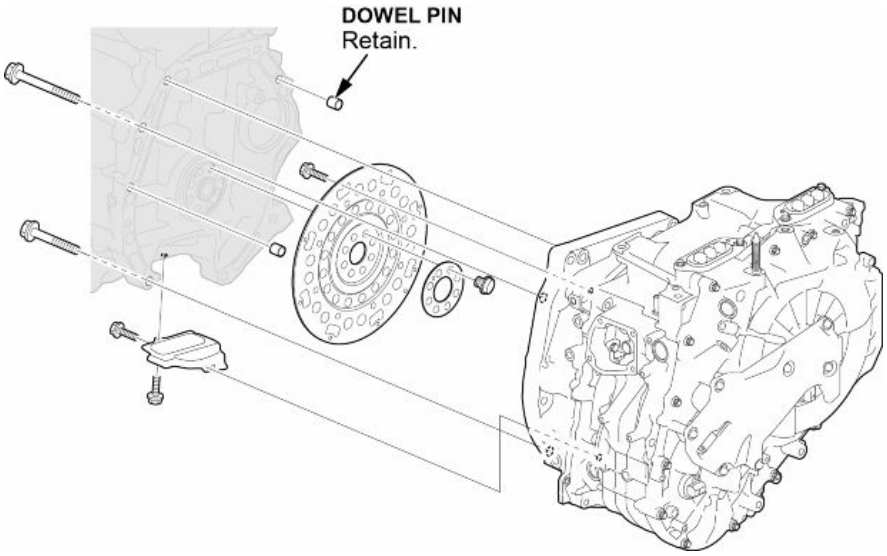


40.4. Remove the transmission carefully.

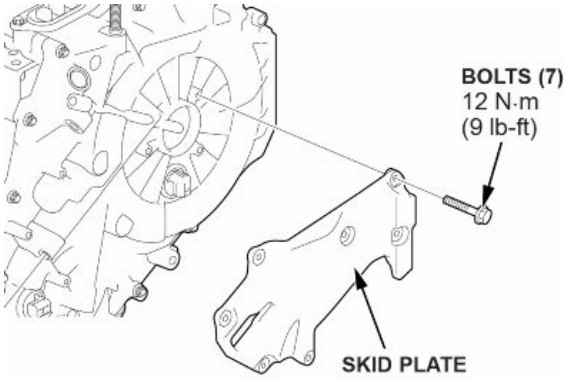
NOTICE

Be careful not to drop the flywheel.

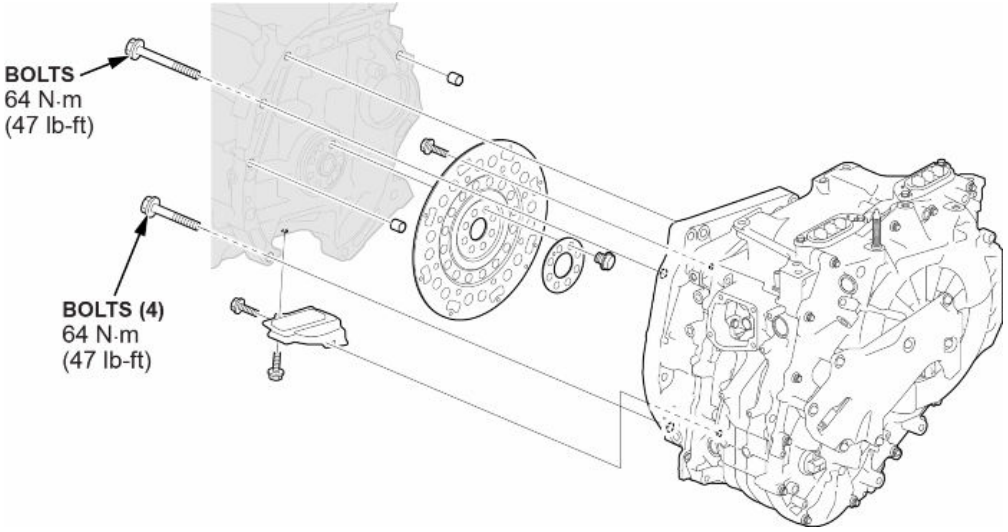
41. Remove the dowel pin, if captured on the original transmission, and transfer it to the replacement unit.



42. Transfer the skid plate.

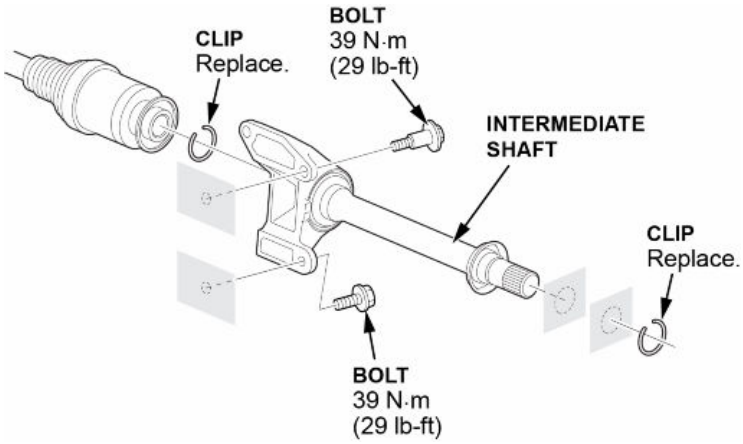


43. Install the new transmission. Tighten the lower mounting bolts to **64 N·m (47 lb-ft)**.



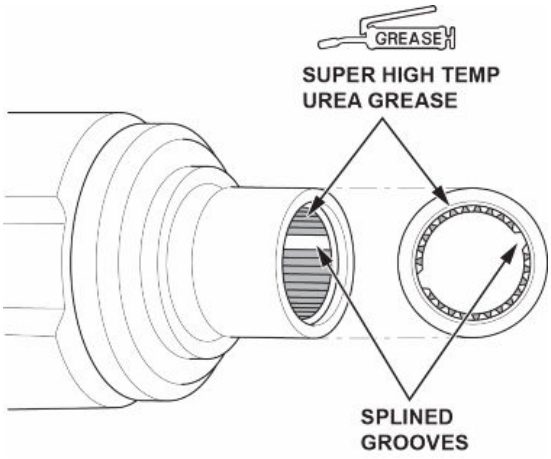
44. Reinstall the transmission fluid cooler hoses.

45. Reinstall the intermediate shaft.

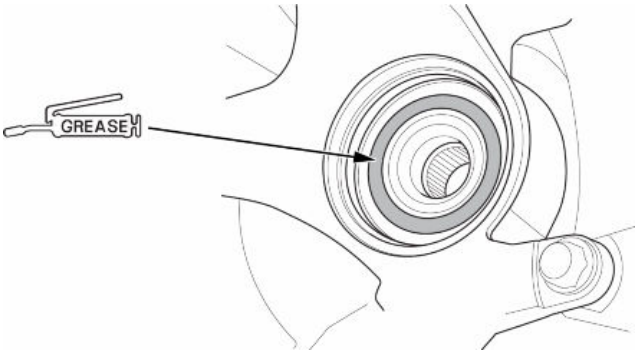


46. Reinstall the left and right driveshafts.

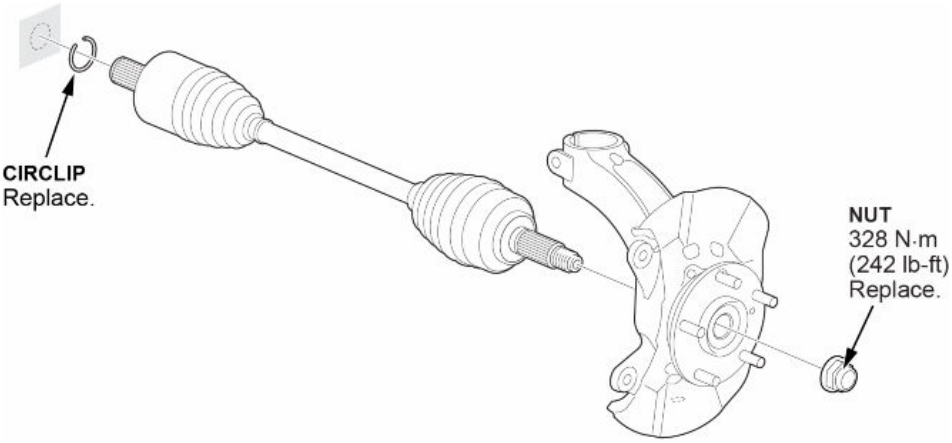
    46.1. Apply the Super High Temp Urea Grease (P/N 08798-9002) or equivalent, then remove the grease from behind the splined grooves at intervals of 2–3 splines so that air can bleed from the intermediate shaft.



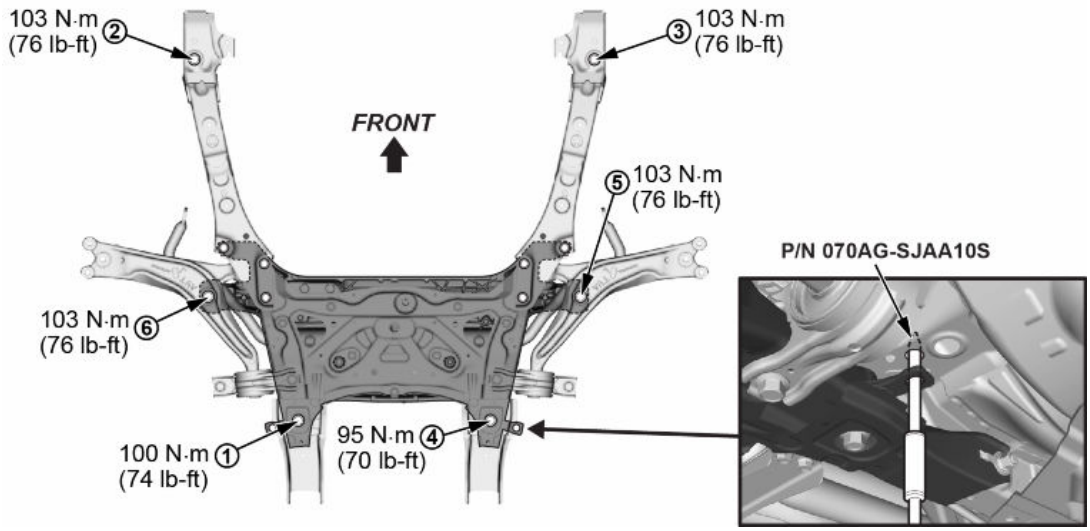
46.2. Apply the specified grease to the contact area of both the outboard joint and front wheel bearing.



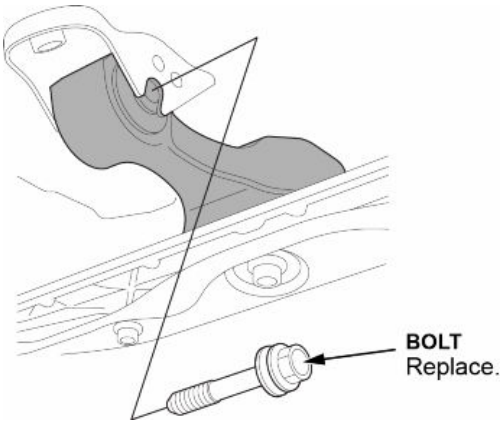
46.3. Install the driveshafts.



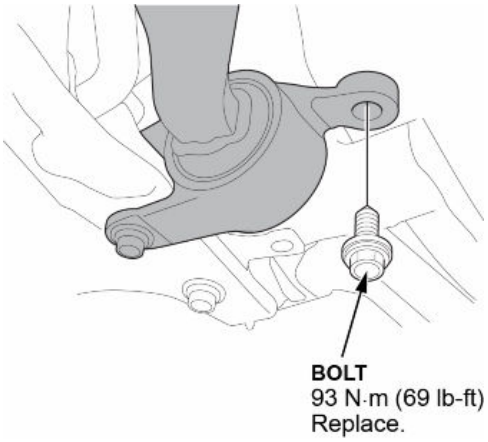
47. Reinstall the subframe using new bolts. Torque the new bolts according to the sequence below.



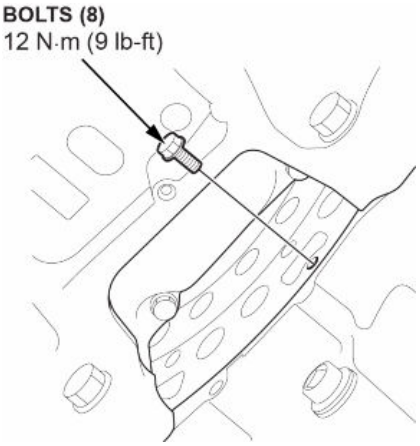
48. Reconnect the torque rod to the engine.



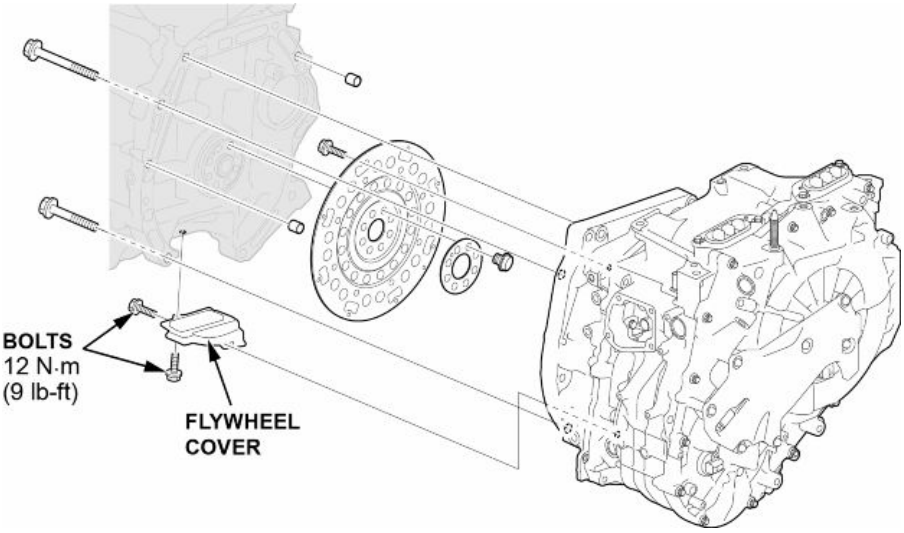
49. Install a new bolt at the compliance bushing.



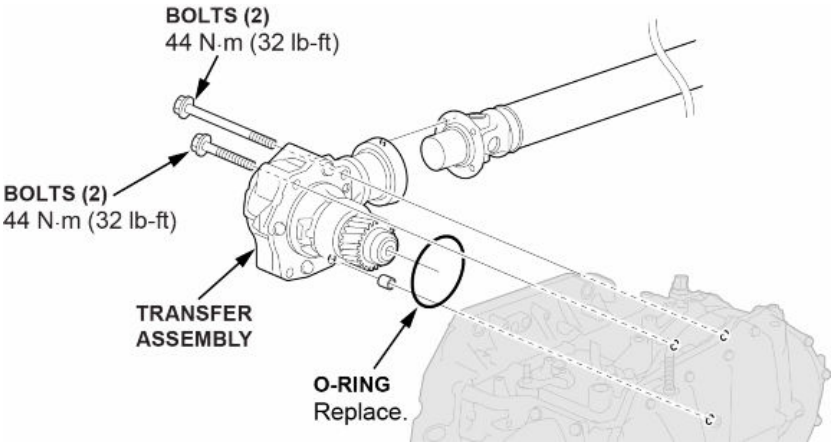
50. Rotate the crankshaft to reinstall the eight bolts securing the drive plate to the flywheel.



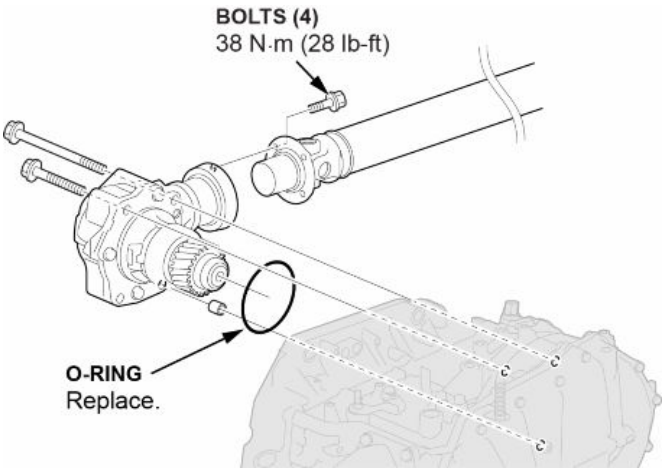
51. Reinstall the flywheel cover.



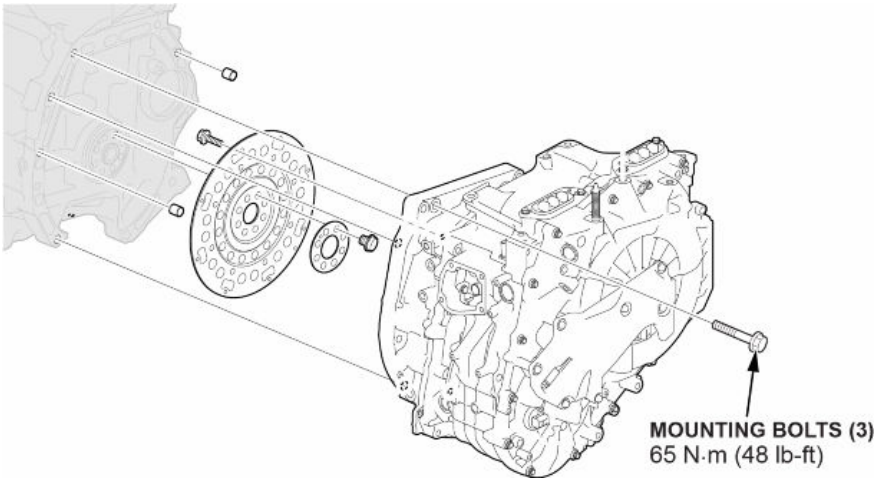
52. Reinstall the transfer assembly.



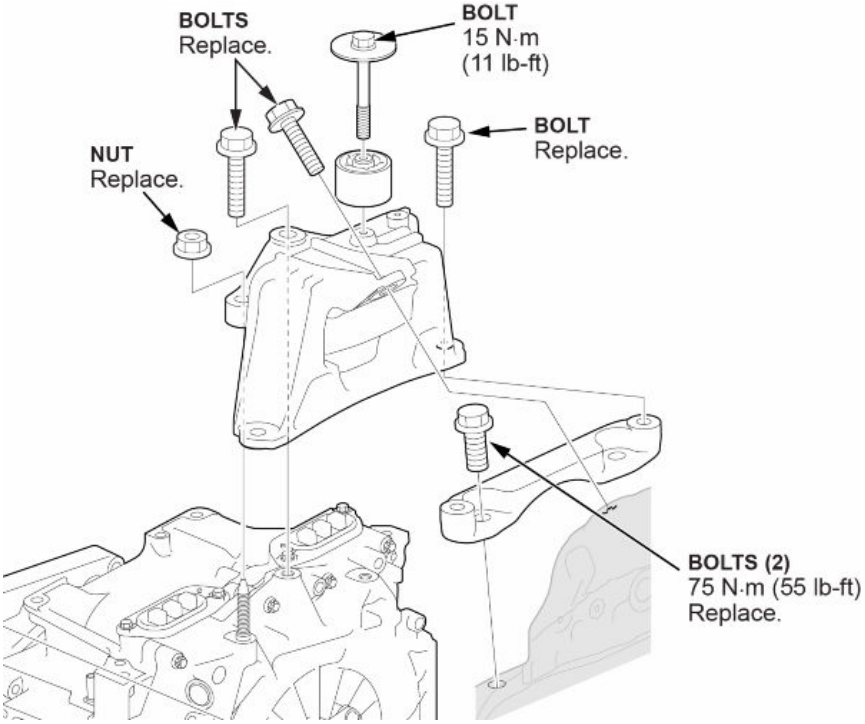
53. Reattach the propeller shaft.



54. Reinstall the upper transmission mounting bolt.



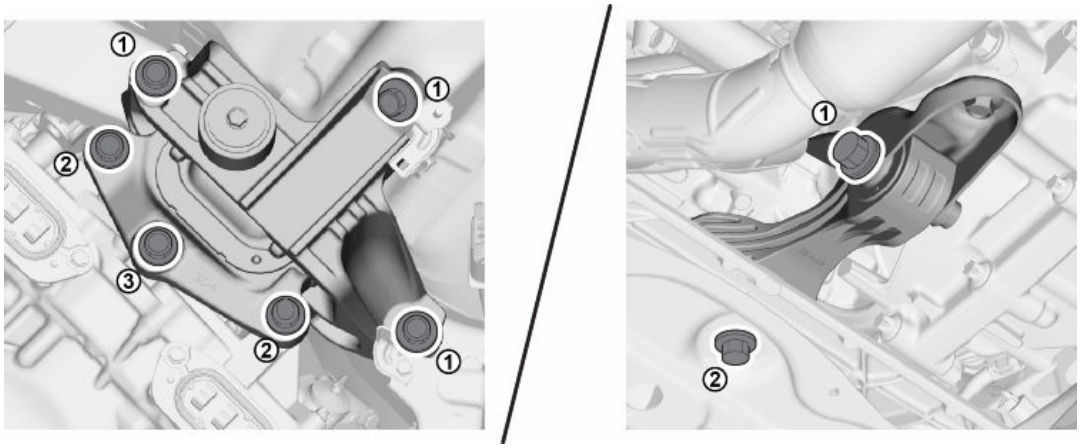
55. Loosely reinstall the transmission mount.



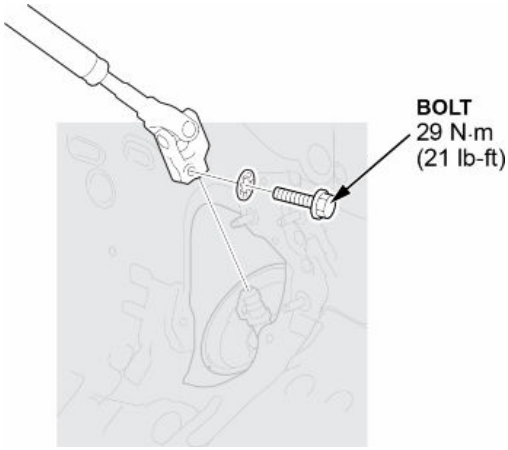
56. Reinstall the mounting bolts and support nuts and torque to specification and sequence.

NOTICE

Failure to follow this sequence may cause excessive noise and vibration which can reduce engine mount life.



57. Remove the engine support hanger.
58. Reconnect the steering joint.



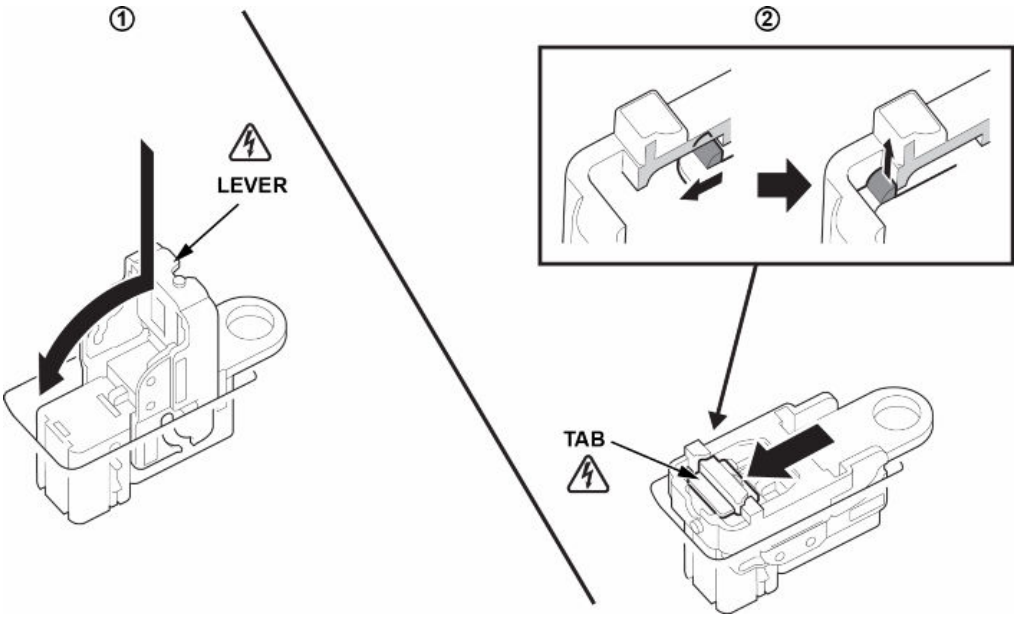
59. Reinstall the remaining parts in reverse order of removal.

60. Service plug.

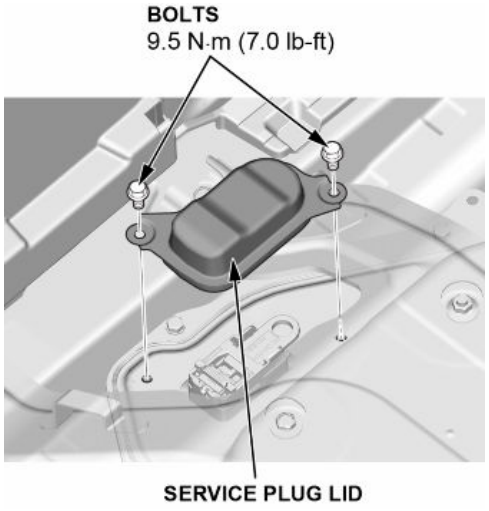
60.1. Insert the service plug into the service plug base, then lower the lever. Push and slide the tab to the locked position while holding the lever.

NOTICE

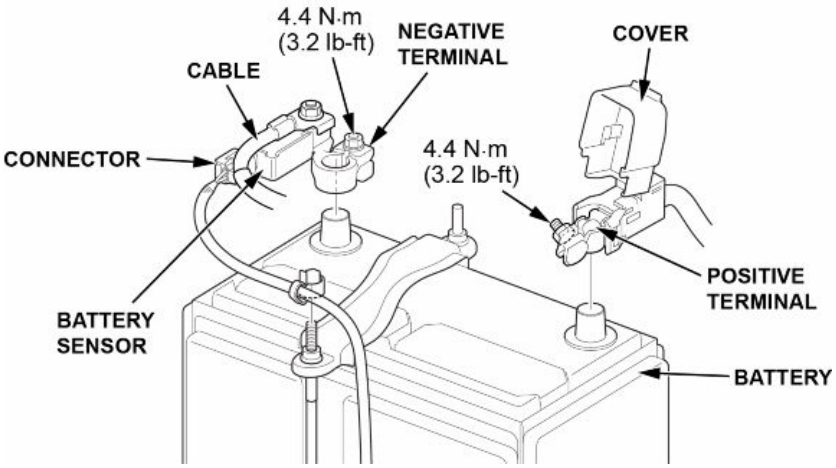
Confirm that the service plug is securely locked and the lever does not come up.



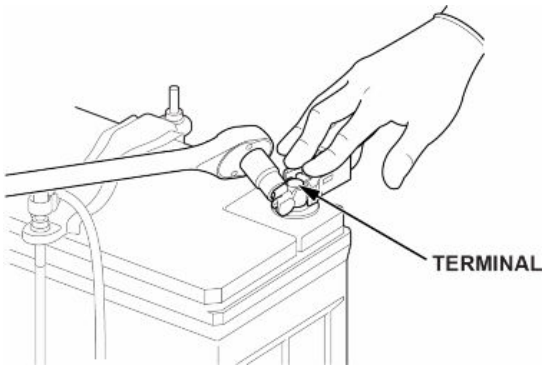
60.2. Install the service plug lid.



61. Reconnect the 12 volt battery.
    61.1. Clean the 12 volt battery terminals.
    61.2. Connect the positive terminal to the 12 volt battery.



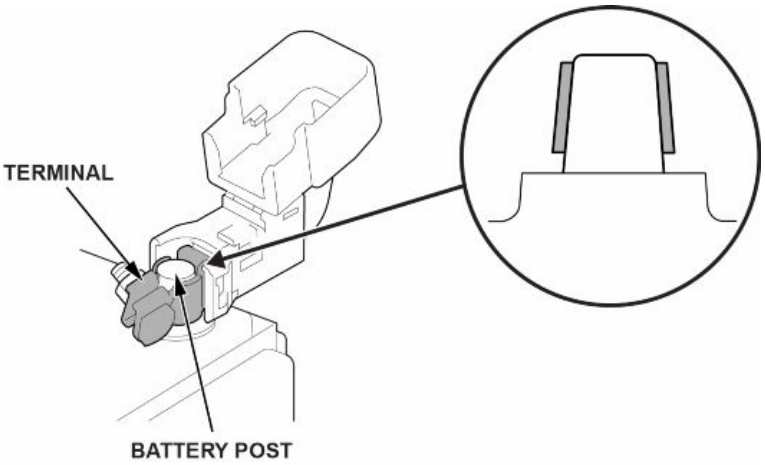
    61.3. While holding down the terminal, torque the clamp to **4.4 N·m (3.2 lb-ft)**.



    61.4. Connect the 12 volt battery sensor/negative terminal to the 12 volt battery.

    NOTE: To protect the 12 volt battery sensor connector from damage, **do not** hold it when installing the terminal.

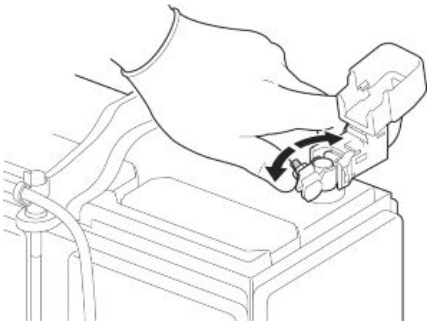
    61.5. Make sure both 12 volt battery terminals are at level or below the battery post.



61.6. Make sure the connection is tight by wiggling the terminals back and forth.

NOTE:

- To protect the 12 volt battery sensor connector from damage, **do not** hold it when removing the terminal.
- If you cannot properly get the terminals to the proper condition or the terminals are not secure, replace either the terminal or 12 volt battery. **Do not** tighten the clamps beyond their specified torque.



61.7. Apply multipurpose grease to the terminals to prevent corrosion.

62. Reinstall the shift cable and adjust.

62.1. Push the shift cable until it stops, then release it.

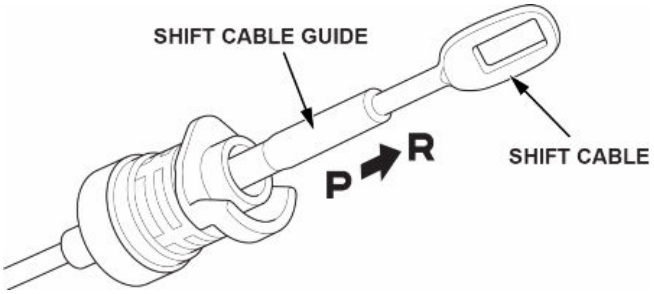
NOTE: **Do not** hold the shift cable guide to adjust the shift cable.

62.2. Pull the shift cable back one step from the P position so that the shift position is in R.

62.3. Turn the vehicle to the ON mode.

62.4. Check that the shift position indicator in the gauge control module display is in R.

62.5. Turn the vehicle to the Off (LOCK) mode.

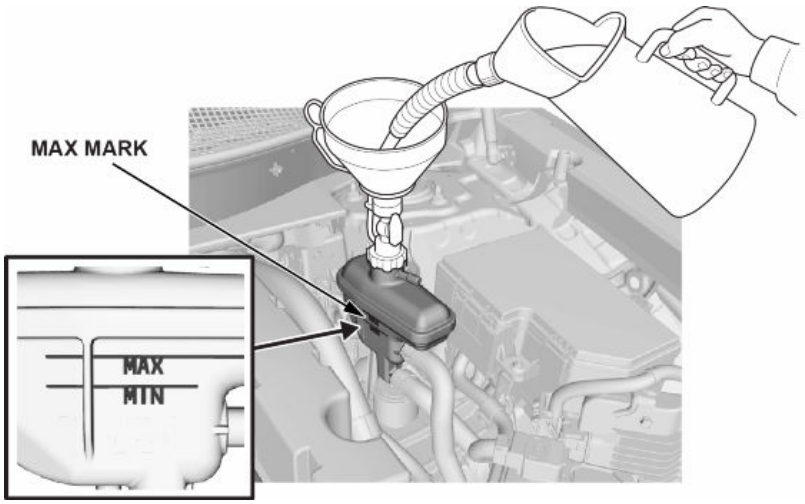


63. Refill the PCU coolant.

63.1. Pour the PCU coolant until the expansion tank is filled to the MAX mark.

NOTE:

- Always use Honda Long Life Antifreeze/Coolant Type 2, and if necessary add Honda Extreme Cold Weather Antifreeze/Coolant Type 2. Using a non-Honda coolant can result in corrosion, causing the cooling system to malfunction or fail.
- Honda Long Life Antifreeze/Coolant Type 2 is a mixture of 50% antifreeze and 50% water. Honda Extreme Cold Weather Antifreeze/Coolant Type 2 is 100% concentration coolant.
- **Do not** add water to either coolant.



63.2. Bleed the air from the PCU coolant with the HDS. Select the following menu buttons on the HDS screen in sequence:

1. **Electric Powertrain (System Selection Menu)**
2. **Adjustment**
3. **Coolant Air Bleeding**
4. **START**

NOTE:

- Pour coolant as needed when the coolant level drops. If the coolant level keeps changing or bubbles are seen even after **10 minutes**, continue to drive the EWP until the coolant level stabilizes and bubbles cease.
- When the POWER SYSTEM indicator comes on, clear the DTC with the HDS, then do “Coolant Air Bleeding” step again.

63.3. After **10 minutes**, press STOP to finish driving the EWP forcibly.

63.4. Check the coolant level and add coolant as necessary until it is at the MAX mark, then install the expansion tank cap.

64. Refill the transmission fluid.

64.1. Remove the filler plug with the sealing washer.

64.2. Refill the e-CVT transmission with the recommended fluid, through the filler plug hole, to the proper level.

64.3. Temporarily install the filler plug with the sealing washer.

65. Check transmission fluid level.

65.1. Turn the vehicle to the OFF (LOCK) mode.

65.2. Turn the vehicle to the ON mode without stepping on the brake pedal.

65.3. Place the transmission in the P position/mode, then press the accelerator to the floor, **twice**.

65.4. Press the brake pedal, shift the transmission to the N position/mode, then press the accelerator pedal to the floor, **twice**.

65.5. Press the brake pedal, shift the transmission to the P position/mode, then press the accelerator pedal to the floor, **twice**.

65.6. Press the power switch while pressing down on the brake pedal. *The vehicle is now in the maintenance mode and the engine will start.*

65.7. Shift the transmission to D position/mode; drive the vehicle above **12 mph (20 km/h)** for at least **1 minute**.

NOTICE

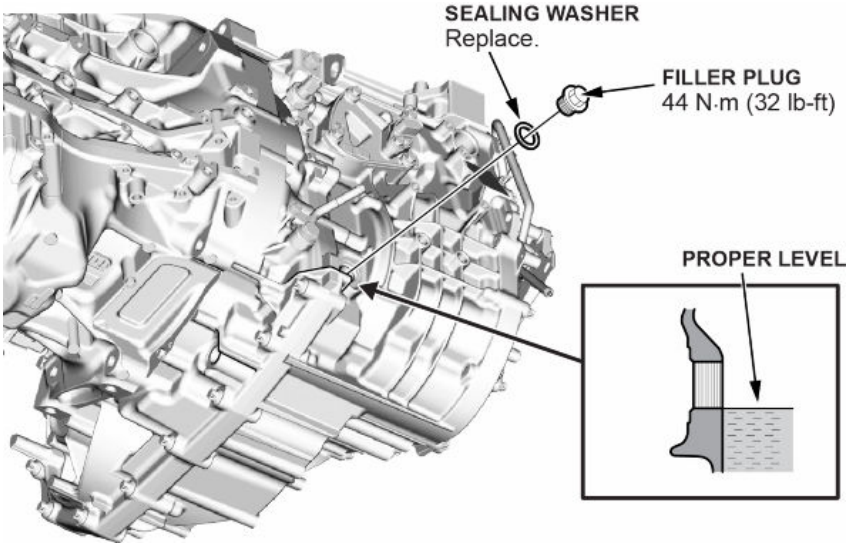
Do not apply the brake hard when working on a running vehicle. It may cause damage to the driveline.

65.8. Turn the engine off.

65.9. Remove the filler plug with the sealing washer.

65.10. Check transmission fluid level. If needed, add fluid to the proper level.

65.11. Install the filler plug with a new sealing washer.



Fluid Amount Details

Application	Operation	Specified Amount
With AWD	At Fluid Change	2.8 L (3.0 US qt)
	At Overhaul	5.1 L (5.4 US qt)

66. Do a wheel alignment.

67. Do the VSA Sensor Neutral Position Memorization Procedure.

Select the following menu buttons on the HDS screen in sequence:

1. **ABS/VSA (System Selection Menu)**
2. **Adjustment**
3. **All Sensor**

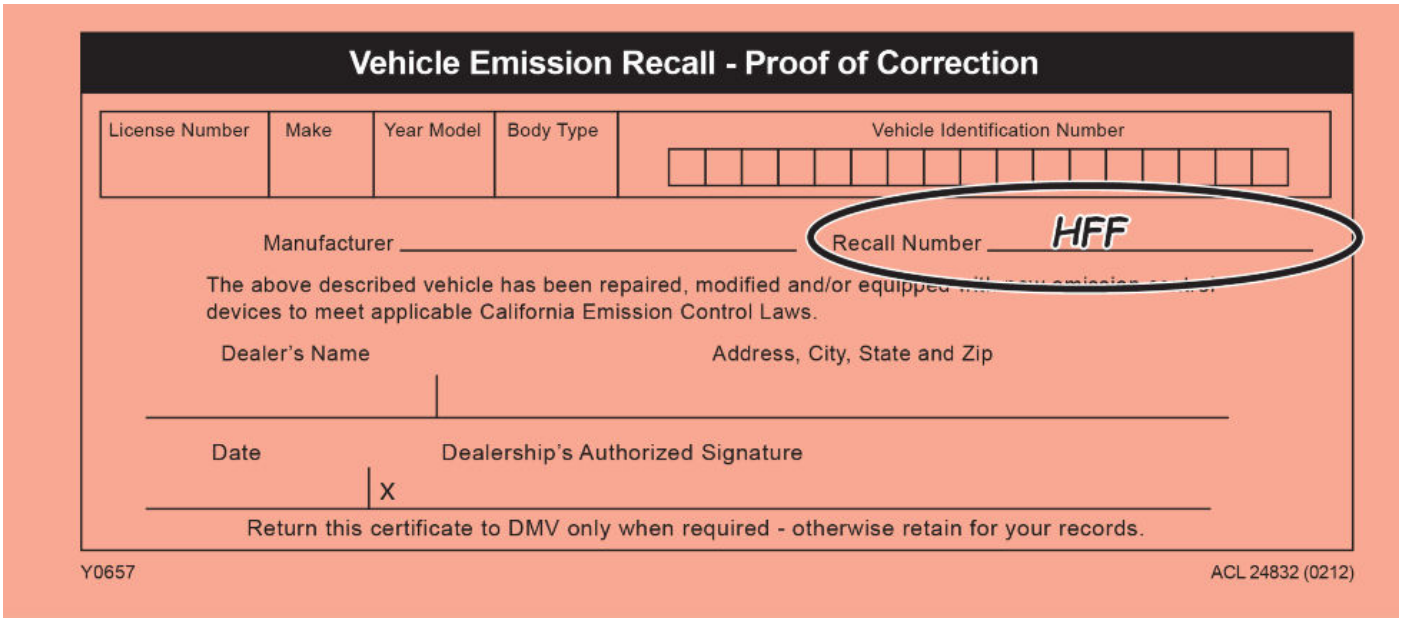
68. Do the Motor Rotor Position Calibration Procedure.

    Select the following menu buttons on the HDS screen in sequence:

    1. **ICM (System Selection Menu)**
    2. **Adjustment**
    3. **Motor Rotor Position Sensor Learning**

69. Test drive vehicle.

70. California residents only: Fill out a Vehicle Emissions Recall - Proof of Correction certificate, and use HFF as the recall number. Have the service advisor give the certificate to your customer, and advise him or her to keep it as proof that the recall was completed. Your customer will need to submit this certificate to the DMV only if the DMV requests it. If you need more certificates, use reorder number Y0657.



Vehicle Emission Recall - Proof of Correction

License Number	Make	Year Model	Body Type	Vehicle Identification Number

Manufacturer _____ Recall Number HFF

The above described vehicle has been repaired, modified and/or equipped [illegible] devices to meet applicable California Emission Control Laws.

Dealer's Name | Address, City, State and Zip

Date | Dealership's Authorized Signature

X

Return this certificate to DMV only when required - otherwise retain for your records.

Y0657 ACL 24832 (0212)

END